

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation:vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation:vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

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**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

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**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

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**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

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**15. Regulatory information**

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

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## 1. Identification of the mixture and of the company

### 1.1- Product identifier

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• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
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FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

### 2.1 Classification of the substance or mixture

#### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

#### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

#### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

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**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

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**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

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**15. Regulatory information**

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

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### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

---

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

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**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

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**15. Regulatory information**

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

### 2.1 Classification of the substance or mixture

#### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

#### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

#### Environmental hazards

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

---

**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

---

**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

---

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

---

**15. Regulatory information**

Follow all regulation in your country.

---

**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

---

**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified
<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

---

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

---

**15. Regulatory information**

Follow all regulation in your country.

---

**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2021-11-19  
Revision Date :

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-ME-2 Ink Brown

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN

TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

### 2.1 Classification of the substance or mixture

#### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

#### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1 B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

#### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark

Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

## 7. Handling and storage

### 7.1 Precautions for safe handling

#### Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

#### Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

#### Caution

When handling do not use high temperature articles, spark and fire.  
Handle container with care, do not make it turn over, drop, give impact and drag.  
Do not breathe, contact and swallow.  
Maintain air concentrations below exposure limit using exhaust ventilation.  
Do not eat, drink or smoke when using this product.  
Wash hand thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.

#### Avoid contact

Refer to section 10 about stability and reactivity.

### 7.2 Conditions for safe storage, including incompatibilities

#### Storage

##### Incompatible materials

Refer to section 10 about stability and reactivity.

##### Storage condition

Store away from heat/sparks/open flames – No smoking  
Store in a well ventilated place. Keep cool and container tightly closed.  
Store locked up.

##### The Containers

Use the container that our company filled up when ship products

### 7.3 Specific end uses

Not applicable

## 8. Exposure control/ personal protection

### 8.1 .1 Control parameters

#### Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m <sup>3</sup> (Total dust,TWA) 5mg/m <sup>3</sup> (Respirable fraction,TWA)	10mg/m <sup>3</sup> (mist,TWA, 2009)

### 8.2 Exposure controls

#### Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.  
Take precautionary measures against static discharge.  
Put up emergency eyewash and shower in case of storage or handling about this product.

#### Protection

##### Respiratory protection

If necessary use suitable respiratory protection.

##### Hand protection

Use suitable protective glove.

##### Eye protection

Use suitable eye protection

##### Skin/body protection

If necessary use suitable respiratory protection.

##### Hygiene measures

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

## 9. Physical and chemical properties

Appearance	Brown Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability No data is available

**Bioaccumulative potential**  
**Mobility in soil**

No data is available  
No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.  
Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.  
Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3  
Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading.  
Avoid acute vibration and friction for container.  
If there are some indications of hazard in transporting like acute leak in transporting,  
take emergency measures and report the accident at once to disaster management agency.  
Avoid transport with foods or feeds.  
Above regulations are not applied to transport of writing instruments filled with the ink.  
Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/19 First version

2022/11/19 No changes required.

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

---

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

---

**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

---

**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

---

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

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**15. Regulatory information**

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

---

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

---

**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

---

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

---

**15. Regulatory information**

Follow all regulation in your country.

---

**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2021-11-19  
Revision Date : 2023-11-19

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-MVE-2 Ink Vermilion

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

- Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
- TEL : +81-3-3268-1193
- FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

- Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

- |                       |                |
|-----------------------|----------------|
| Flammable liquids     | Not classified |
| Pyrophoric liquids    | Not classified |
| Self-heating mixtures | Not classified |
| Corrosive to metals   | Not classified |

##### Health hazards

- |                                   |                             |
|-----------------------------------|-----------------------------|
| Acute toxicity-Oral               | Not classified              |
| Acute toxicity-Dermal             | Not classified              |
| Acute toxicity-Inhalation: vapour | Classification not possible |

- Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

- |  |                             |
|--|-----------------------------|
| Skin corrosion / irritation                        | Not classified              |
| Serious eye damage / eye irritation                | Not classified              |
| Respiratory or skin sensitization                  | Not classified / Category 1 |
| Germ cell mutagenicity                             | Not classified              |
| Carcinogenicity                                    | Not classified              |
| Reproductive toxicity                              | Category 1 B                |
| Specific target organ toxicity (Single exposure)   | Not classified              |
| Specific target organ toxicity (Repeated exposure) | Not classified              |
| Aspiration hazard                                  | Classification not possible |

##### Environmental hazards

- |  |                |
|--|----------------|
| Hazardous to the aquatic environment (acute)   | Category 3     |
| Hazardous to the aquatic environment (chronic) | Not classified |

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

---

**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.  
Handle container with care, do not make it turn over, drop, give impact and drag.  
Do not breathe, contact and swallow.  
Maintain air concentrations below exposure limit using exhaust ventilation.  
Do not eat, drink or smoke when using this product.  
Wash hand thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking  
Store in a well ventilated place. Keep cool and container tightly closed.  
Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m <sup>3</sup> (Total dust,TWA) 5mg/m <sup>3</sup> (Respirable fraction,TWA)	10mg/m <sup>3</sup> (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.  
Take precautionary measures against static discharge.  
Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

---

## 9. Physical and chemical properties

Appearance	Orange Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

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## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

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## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

---

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability	No data is available
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<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.

Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3

Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/19 First version

2023/11/19 Second version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

- Disposal must be made according to official regulations.
- Avoid release to the environment.

**Contaminated container and packaging**

- Do not flush into the sewer.
  - Remove all contents when you dispose of empty containers.
- 

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

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**15. Regulatory information**

Follow all regulation in your country.

---

**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2021-11-19  
Revision Date :

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-MGO-2 Ink Gold

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN

TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

### 2.1 Classification of the substance or mixture

#### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

#### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1 B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

#### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark

Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

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**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

## 7. Handling and storage

### 7.1 Precautions for safe handling

#### Technical measures

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

#### Local exhaust ventilation and general ventilation

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

#### Caution

When handling do not use high temperature articles, spark and fire.  
Handle container with care, do not make it turn over, drop, give impact and drag.  
Do not breathe, contact and swallow.  
Maintain air concentrations below exposure limit using exhaust ventilation.  
Do not eat, drink or smoke when using this product.  
Wash hand thoroughly after handling.  
Use only outdoors or in a well-ventilated area.  
Avoid release to the environment.

#### Avoid contact

Refer to section 10 about stability and reactivity.

### 7.2 Conditions for safe storage, including incompatibilities

#### Storage

##### Incompatible materials

Refer to section 10 about stability and reactivity.

##### Storage condition

Store away from heat/sparks/open flames – No smoking  
Store in a well ventilated place. Keep cool and container tightly closed.  
Store locked up.

##### The Containers

Use the container that our company filled up when ship products

### 7.3 Specific end uses

Not applicable

## 8. Exposure control/ personal protection

### 8.1 .1 Control parameters

#### Exposure limit values

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m <sup>3</sup> (Total dust,TWA) 5mg/m <sup>3</sup> (Respirable fraction,TWA)	10mg/m <sup>3</sup> (mist,TWA, 2009)

### 8.2 Exposure controls

#### Equipment measures

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.  
Take precautionary measures against static discharge.  
Put up emergency eyewash and shower in case of storage or handling about this product.

#### Protection

##### Respiratory protection

If necessary use suitable respiratory protection.

##### Hand protection

Use suitable protective glove.

##### Eye protection

Use suitable eye protection

##### Skin/body protection

If necessary use suitable respiratory protection.

##### Hygiene measures

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

## 9. Physical and chemical properties

Appearance	Gold Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability No data is available

**Bioaccumulative potential**  
**Mobility in soil**

No data is available  
No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.  
Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.  
Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3  
Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading.  
Avoid acute vibration and friction for container.  
If there are some indications of hazard in transporting like acute leak in transporting,  
take emergency measures and report the accident at once to disaster management agency.  
Avoid transport with foods or feeds.  
Above regulations are not applied to transport of writing instruments filled with the ink.  
Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/19 First version

2022/11/19 No changes required.

# Safety Data Sheet

Version OSHA-1.0  
Date of issue :2021-11-15  
Revision Date:

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : Infilled ink about following items

• **Mildliner Highlighter** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

• **Mildliner Brush Pen** (Mild Blue, Mild Blue Green, Mild Yellow, Mild Orange, Mild Pink, Mild Red, Mild Violet, Mild Gray, Mild Dark Blue, Mild Green, Mild Brown, Mild Vermilion, Mild Gold, Mild Smork Blue, Mild Citrus Green, Mild Red Purple, Mild Marigold, Mild Lemom Yellow, Mild Cyan, Mild Coral Pink, Mild Lavender, Mild Apricot)

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

• Use of the substance/mixture : Ink for writing implement  
• Recommended restrictions on use : No information available  
• Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN  
TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

##### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity (Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

##### Environmental hazards

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

**Hazard(s) not otherwise classified (HNOG)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 25 %	56-81-5
Water	55 – 65 %	7732-18-5
Pigments	0 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell
- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing

•If eye irritation persists : Get medical advice/attention

**After ingestion:**

•Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

---

**7. Handling and storage****7.1 Precautions for safe handling****Technical measures**

Do suitable equipment measures and use suitable protection that refer to

"8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to

"8. Exposure control/ personal protection".

**Caution**

When handling do not use high temperature articles, spark and fire.

Handle container with care, do not make it turn over, drop, give impact and drag.

Do not breathe, contact and swallow.

Maintain air concentrations below exposure limit using exhaust ventilation.

Do not eat, drink or smoke when using this product.

Wash hand thoroughly after handling.

Use only outdoors or in a well-ventilated area.

Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities****Storage****Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

Store away from heat/sparks/open flames – No smoking

Store in a well ventilated place. Keep cool and container tightly closed.

Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection****8.1 .1 Control parameters****Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls****Equipment measures**

Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.

Take precautionary measures against static discharge.

Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection****Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.

Wash thoroughly after handling

**9. Physical and chemical properties**

<b>Appearance</b>	Colored Liquid
<b>Odour</b>	Peculiar odour
<b>Odour threshold</b>	No data available
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Flammability</b>	No data available
<b>Melting point / Coagulating point</b>	No data available
<b>Boiling point</b>	No data available
<b>Flash point</b>	No data available
<b>Explosive limit UEL</b>	No data available
<b>Explosive limit LEL</b>	No data available
<b>Vapour pressure</b>	No data available
<b>Vapour density</b>	No data available
<b>Relative density</b>	No data available
<b>Water solubility</b>	Soluble in water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Ignition point</b>	No data available
<b>Decomposition point</b>	No data available
<b>Viscosity</b>	No data available
<b>Explosive properties</b>	No data available
<b>Oxidising properties</b>	No data available

**Other information**

No data available

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**10. Stability and reactivity**

<b>Chemical stability</b>	This product is stable in normal condition.
<b>Materials to Avoid</b>	No data available
<b>Conditions to avoid</b>	No data available
<b>Incompatible materials</b>	No data available
<b>Hazardous decomposition products</b>	No data available

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**11. Toxicological information**

<b>Acute toxicity–Oral</b>	Not classified
<b>Acute toxicity–Dermal</b>	Not classified
<b>Acute toxicity–Inhalation: vapour</b>	Classification not possible
<b>Skin corrosion / irritation</b>	Not classified
<b>Serious eye damage / eye irritation</b>	Not classified
<b>Respiratory or skin sensitization</b>	Not classified / Category 1
<b>Germ cell mutagenicity</b>	Not classified
<b>Carcinogenicity</b>	Not classified
<b>Reproductive toxicity</b>	Category 1B
<b>Specific target organ toxicity(Singel exposure)</b>	Not classified
<b>Specific target organ toxicity(Repeated exposure)</b>	Not classified
<b>Aspiration hazard</b>	Classification not possible

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**12. Ecological information**

<b>Hazardous to the aquatic environment(acute)</b>	Category 3
<b>Hazardous to the aquatic environment(chronic)</b>	Not classified

<b>Degradability</b>	No data is available
<b>Bioaccumulative potential</b>	No data is available
<b>Mobility in soil</b>	No data is available

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**13. Disposal considerations****Waste treatment methods****Waste residues**

Disposal must be made according to official regulations.

Avoid release to the environment.

**Contaminated container and packaging**

Do not flush into the sewer.

Remove all contents when you dispose of empty containers.

---

**14. Transport information****14.1 Un number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packaging group****International regulation****IMDG (Maritime transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

**ICAO/IATA (Air transport)**

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

**ADR/RID (Land transport)**

UN No.	Not applicable
Class	–

Packing Group -  
Shipping name -

**14.5 Environmental hazards**

Hazardous to the aquatic environment(acute) Category 3  
Hazardous to the aquatic environment(chronic) Not classified

**14.6 Special precautions for user**

Not applicable.

**Special precautions**

Prevent from falling, stumbling and doing damage when the container loading..

Avoid acute vibration and friction for container.

If there are some indications of hazard in transporting like acute leak in transporting,

take emergency measures and report the accident at once to disaster management agency.

Avoid transport with foods or feeds.

Above regulations are not applied to transport of writing instruments filled with the ink.

Follow all regulation in your country.

---

**15. Regulatory information**

Follow all regulation in your country.

---

**16. Other information**

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

**Revision**

2021/11/15 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2021-11-19  
Revision Date :

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-MMZ-2 Ink Magenta

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

• Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN

TEL : +81-3-3268-1193  
FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

• Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

Classification of the chemical in accordance with paragraph (d) of § 1910.1200

### 2.1 Classification of the substance or mixture

#### Physical hazards

Flammable liquids	Not classified
Pyrophoric liquids	Not classified
Self-heating mixtures	Not classified
Corrosive to metals	Not classified

#### Health hazards

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible

Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified / Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1 B
Specific target organ toxicity (Single exposure)	Not classified
Specific target organ toxicity (Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

#### Environmental hazards

Hazardous to the aquatic environment (acute)	Category 3
Hazardous to the aquatic environment (chronic)	Not classified

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

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**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

**7. Handling and storage**

**7.1 Precautions for safe handling**

**Technical measures**

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

**Caution**

- When handling do not use high temperature articles, spark and fire.
- Handle container with care, do not make it turn over, drop, give impact and drag.
- Do not breathe, contact and swallow.
- Maintain air concentrations below exposure limit using exhaust ventilation.
- Do not eat, drink or smoke when using this product.
- Wash hand thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities**

**Storage**

**Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

- Store away from heat/sparks/open flames – No smoking
- Store in a well ventilated place. Keep cool and container tightly closed.
- Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection**

**8.1 .1 Control parameters**

**Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls**

**Equipment measures**

- Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
- Take precautionary measures against static discharge.
- Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection**

**Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

## 9. Physical and chemical properties

Appearance	Magenta Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability No data is available

**Bioaccumulative potential**  
**Mobility in soil**

No data is available  
No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.  
Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.  
Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3  
Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading.  
Avoid acute vibration and friction for container.  
If there are some indications of hazard in transporting like acute leak in transporting,  
take emergency measures and report the accident at once to disaster management agency.  
Avoid transport with foods or feeds.  
Above regulations are not applied to transport of writing instruments filled with the ink.  
Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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## 16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

### Revision

2021/11/19 First version

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2022-11-19  
Revision Date : 2025-07-21

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-MG-2 Ink Green

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

- Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
- TEL : +81-3-3268-1193
- FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

- Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

- |                       |                |
|-----------------------|----------------|
| Flammable liquids     | Not classified |
| Pyrophoric liquids    | Not classified |
| Self-heating mixtures | Not classified |
| Corrosive to metals   | Not classified |

##### Health hazards

- |                                   |                             |
|-----------------------------------|-----------------------------|
| Acute toxicity-Oral               | Not classified              |
| Acute toxicity-Dermal             | Not classified              |
| Acute toxicity-Inhalation: vapour | Classification not possible |

- Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation: vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

- |  |                             |
|--|-----------------------------|
| Skin corrosion / irritation                        | Not classified              |
| Serious eye damage / eye irritation                | Not classified              |
| Respiratory or skin sensitization                  | Not classified / Category 1 |
| Germ cell mutagenicity                             | Not classified              |
| Carcinogenicity                                    | Not classified              |
| Reproductive toxicity                              | Category 1 B                |
| Specific target organ toxicity (Single exposure)   | Not classified              |
| Specific target organ toxicity (Repeated exposure) | Not classified              |
| Aspiration hazard                                  | Classification not possible |

##### Environmental hazards

- |  |                |
|--|----------------|
| Hazardous to the aquatic environment (acute)   | Category 3     |
| Hazardous to the aquatic environment (chronic) | Not classified |

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark



Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

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**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

**7. Handling and storage**

**7.1 Precautions for safe handling**

**Technical measures**

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

**Caution**

- When handling do not use high temperature articles, spark and fire.
- Handle container with care, do not make it turn over, drop, give impact and drag.
- Do not breathe, contact and swallow.
- Maintain air concentrations below exposure limit using exhaust ventilation.
- Do not eat, drink or smoke when using this product.
- Wash hand thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities**

**Storage**

**Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

- Store away from heat/sparks/open flames – No smoking
- Store in a well ventilated place. Keep cool and container tightly closed.
- Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection**

**8.1 .1 Control parameters**

**Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls**

**Equipment measures**

- Put up local exhaust ventilation. Use explosion-proof electrical/ventilating/lighting.
- Take precautionary measures against static discharge.
- Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection**

**Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

## 9. Physical and chemical properties

Appearance	Green Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability No data is available

**Bioaccumulative potential**  
**Mobility in soil**

No data is available  
No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.  
Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.  
Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3  
Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading.  
Avoid acute vibration and friction for container.  
If there are some indications of hazard in transporting like acute leak in transporting,  
take emergency measures and report the accident at once to disaster management agency.  
Avoid transport with foods or feeds.  
Above regulations are not applied to transport of writing instruments filled with the ink.  
Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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## 16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

### Revision

2021/11/19 First version

2022/11/19 No changes required.

2025/07/21 No changes required.

# Safety Data Sheet

Version OSHA-1.0  
Date of issue : 2021-11-19  
Revision Date : 2023-11-19

## 1. Identification of the mixture and of the company

### 1.1- Product identifier

Product name : WKT7-MSB-2 Ink SBlue

### 1.2 – Relevant identified uses of the substance or mixture and uses advised against

- Use of the substance/mixture : Ink for writing implement
- Recommended restrictions on use : No information available
- Uses Advised Against : No information available

### 1.3 – Details of the supplier of the SDS

- Manufacture : ZEBRA CO., LTD.  
2-9 Higashi-gokencho Shinjuku-ku Tokyo JAPAN
- TEL : +81-3-3268-1193
- FAX : +81-3-3268-1197

### 1.4 – Emergency telephone number

- Manufacture : +81-3-3268-1193  
This phone number is available only during office hours: 9 a.m. to half past 5 p.m.  
(Japan time)

## 2. Hazards identification

### Classification of the chemical in accordance with paragraph (d) of § 1910.1200

#### 2.1 Classification of the substance or mixture

##### Physical hazards

- |                       |                |
|-----------------------|----------------|
| Flammable liquids     | Not classified |
| Pyrophoric liquids    | Not classified |
| Self-heating mixtures | Not classified |
| Corrosive to metals   | Not classified |

##### Health hazards

- |                                    |                             |
|------------------------------------|-----------------------------|
| Acute toxicity-Oral                | Not classified              |
| Acute toxicity-Dermal              | Not classified              |
| Acute toxicity-Inhalation : vapour | Classification not possible |

- Unknown Acute Oral Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Dermal Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.  
Unknown Acute Inhalation : vapour Toxicity: 31% of the mixture consists of ingredient(s) of unknown acute toxicity.

- |  |                             |
|--|-----------------------------|
| Skin corrosion / irritation                        | Not classified              |
| Serious eye damage / eye irritation                | Not classified              |
| Respiratory or skin sensitization                  | Not classified / Category 1 |
| Germ cell mutagenicity                             | Not classified              |
| Carcinogenicity                                    | Not classified              |
| Reproductive toxicity                              | Category 1 B                |
| Specific target organ toxicity (Single exposure)   | Not classified              |
| Specific target organ toxicity (Repeated exposure) | Not classified              |
| Aspiration hazard                                  | Classification not possible |

##### Environmental hazards

- |  |                |
|--|----------------|
| Hazardous to the aquatic environment (acute)   | Category 3     |
| Hazardous to the aquatic environment (chronic) | Not classified |

**Hazard(s) not otherwise classified (HNOC)**

None known.

**2.2 Label elements****Pictograms or Symbol**

Exclamation mark

Health Hazard

**Signal Word**

Danger

**Hazard statement**

- May cause an allergic skin reaction
- May damage fertility or the unborn child
- Harmful to aquatic life

**Precautionary Statements****Prevention**

- Avoid breathing vapours
- Contaminated work clothing should not be allowed out of the workplace
- Wear protective gloves/protective clothing/eye protection/face protection
- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Avoid release to the environment

**Response**

- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.
- IF exposed or concerned: Get medical advice/attention

**Storage**

- Store in a well ventilated place. Keep cool and container tightly closed.

**Disposal**

- Dispose of contents/container to in accordance with local government regulation.

**3. Composition/information on ingredients****3.1 Substance** : Not applicable**3.2 Mixture****Component and Amount**

Component	Amount	CAS No.
Glycerol	15 – 20 %	56-81-5
Water	60 – 65 %	7732-18-5
Pigments	1 – 5 %	Trade Secret
Resins	10 –15 %	Trade Secret
Additives	1 – 5 %	Trade Secret

**Additional information**

The specific chemical identify and exact percentages of composition of the mixture has been withheld as a Trade Secrets in accordance with the provisions of paragraph (i) of § 1910.1200 of 29 CFR1910.1200 .

**4. First-aid measures****4.1 Description of First-aid measures****After inhalation:**

- Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell

**After skin contact:**

- Call a POISON CENTER or doctor/physician if you feel unwell

- If skin irritation occurs: Get medical advice/attention
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN: Wash with soap and water
- If skin irritation or a rash occurs: Get medical advice/attention
- Take off contaminated clothing and wash it before reuse.

**After eye contact:**

- IF IN EYES: Rinse continuously with water for several minutes.  
Remove contact lenses if present and easy to do . Continue rinsing
- If eye irritation persists : Get medical advice/attention

**After ingestion:**

- Call a POISON CENTER or doctor/physician if you feel unwell

**Protection of the person who takes first aid**

Nothing in particular.

**4.2 Most important symptoms and effects, both acute and delayed**

No significant reaction of the human body to this product known.

**4.3 Indication of any immediate medical attention and special treatment needed**

There is no specific and immediate treatment, but should consult a doctor.

---

**5. Fire-fighting measures****5.1 Suitable Extinguishing media**

Carbon dioxide, dry chemical powder, water fog, foam

**5.2 Special hazards arising from the substance or mixture****Prohibition extinguishing media for safety reason**

Water spray (straight)

**5.3 Advice for firefighters****Specific hazards**

This product is not combustible. But evaporated residue is combustible .

**Specific fire fighting procedures**

If safe to do so, move undamaged containers from the fire area.

If can't move the container , cool containers and surrounding with spray water

Cool containers with large quantities of water until well after extinguished the fire.

**Special protective equipment for fire-fighters**

Fire-fighting should be performed from the windward side.

Respiratory protection, and other suitable protective equipment

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**6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****Personal precautions**

The pollution area should be established as off limits without concerned persons.

**Protective equipment and emergency measure**

Do not touch the leakage or its damaged container without suitable protection.

Do not walk through the leakage.

Keep sufficient ventilation if the area is indoor.

Remove ignition sources.

**6.2 Environmental precautions**

Keep away from drains, and prevent from releasing to the environment.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Use non-flammable absorbent materials, and put them in airtight container.

Dispose of absorbent in accordance with law.

**Prevention of secondary disaster**

Remove nearby ignition source and hot surface.

**6.4 Reference to other sections**

Refer to section 8 and 13.

**7. Handling and storage**

**7.1 Precautions for safe handling**

**Technical measures**

Do suitable equipment measures and use suitable protection that refer to "8. Exposure control/ personal protection".

**Local exhaust ventilation and general ventilation**

Use local exhaust ventilation and general ventilation that refer to "8. Exposure control/ personal protection".

**Caution**

- When handling do not use high temperature articles, spark and fire.
- Handle container with care, do not make it turn over, drop, give impact and drag.
- Do not breathe, contact and swallow.
- Maintain air concentrations below exposure limit using exhaust ventilation.
- Do not eat, drink or smoke when using this product.
- Wash hand thoroughly after handling.
- Use only outdoors or in a well-ventilated area.
- Avoid release to the environment.

**Avoid contact**

Refer to section 10 about stability and reactivity.

**7.2 Conditions for safe storage, including incompatibilities**

**Storage**

**Incompatible materials**

Refer to section 10 about stability and reactivity.

**Storage condition**

- Store away from heat/sparks/open flames – No smoking
- Store in a well ventilated place. Keep cool and container tightly closed.
- Store locked up.

**The Containers**

Use the container that our company filled up when ship products

**7.3 Specific end uses**

Not applicable

**8. Exposure control/ personal protection**

**8.1 .1 Control parameters**

**Exposure limit values**

Chemical name	OSHA Permissible Exposure Limits (PEL)	ACGIH TLV-TWA
Glycerol	15mg/m3 (Total dust,TWA) 5mg/m3 (Respirable fraction,TWA)	10mg/m3 (mist,TWA, 2009)

**8.2 Exposure controls**

**Equipment measures**

- Put up local exhaust ventilation.Use explosion-proof electrical/ventilating/lighting.
- Take precautionary measures against static discharge.
- Put up emergency eyewash and shower in case of storage or handling about this product.

**Protection**

**Respiratory protection**

If necessary use suitable respiratory protection.

**Hand protection**

Use suitable protective glove.

**Eye protection**

Use suitable eye protection

**Skin/body protection**

If necessary use suitable respiratory protection.

**Hygiene measures**

Do not eat ,drink or smoke when using this product.  
Wash thoroughly after handling

## 9. Physical and chemical properties

Appearance	Blue Liquid
Odour	Peculiar odour
Odour threshold	No data available
pH	No data available
Evaporation rate	No data available
Flammability	No data available
Melting point / Coagulating point	No data available
Boiling point	No data available
Flash point	No data available
Explosive limit UEL	No data available
Explosive limit LEL	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	Soluble in water
Partition coefficient n-octanol/water	No data available
Ignition point	No data available
Decomposition point	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available

### Other information

No data available

## 10. Stability and reactivity

Chemical stability	This product is stable in normal condition.
Materials to Avoid	No data available
Conditions to avoid	No data available
Incompatible materials	No data available
Hazardous decomposition products	No data available

## 11. Toxicological information

Acute toxicity-Oral	Not classified
Acute toxicity-Dermal	Not classified
Acute toxicity-Inhalation: vapour	Classification not possible
Skin corrosion / irritation	Not classified
Serious eye damage / eye irritation	Not classified
Respiratory or skin sensitization	Not classified/Category 1
Germ cell mutagenicity	Not classified
Carcinogenicity	Not classified
Reproductive toxicity	Category 1B
Specific target organ toxicity(Singel exposure)	Not classified
Specific target organ toxicity(Repeated exposure)	Not classified
Aspiration hazard	Classification not possible

## 12. Ecological information

Hazardous to the aquatic environment(acute)	Category 3
Hazardous to the aquatic environment(chronic)	Not classified

Degradability No data is available

**Bioaccumulative potential**  
**Mobility in soil**

No data is available  
No data is available

### 13. Disposal considerations

#### Waste treatment methods

##### Waste residues

Disposal must be made according to official regulations.  
Avoid release to the environment.

##### Contaminated container and packaging

Do not flush into the sewer.  
Remove all contents when you dispose of empty containers.

### 14. Transport information

#### 14.1 Un number

#### 14.2 UN proper shipping name

#### 14.3 Transport hazard class(es)

#### 14.4 Packaging group

#### International regulation

##### IMDG (Maritime transport)

UN No.	Not applicable
Class	–
Packing Group	–
Marine Pollutant	–
Shipping name	–

##### ICAO/IATA (Air transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

##### ADR/RID (Land transport)

UN No.	Not applicable
Class	–
Packing Group	–
Shipping name	–

#### 14.5 Environmental hazards

Hazardous to the aquatic environment(acute)      Category 3  
Hazardous to the aquatic environment(chronic)      Not classified

#### 14.6 Special precautions for user

Not applicable.

#### Special precautions

Prevent from falling, stumbling and doing damage when the container loading.  
Avoid acute vibration and friction for container.  
If there are some indications of hazard in transporting like acute leak in transporting,  
take emergency measures and report the accident at once to disaster management agency.  
Avoid transport with foods or feeds.  
Above regulations are not applied to transport of writing instruments filled with the ink.  
Follow all regulation in your country.

### 15. Regulatory information

Follow all regulation in your country.

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## 16. Other information

In this sheet, the contents of ingredients and the value of physical and chemical properties are not guaranteed performance.

The information contained in this sheet is based on the data available at now.

But this shall not constitute a guarantee for any specific or classification.

Please be alert to handling this product because chemicals shall have unknown hazards.

This sheet may be revised when we get new information.

The information is assumed in the case of large-scale handling on business operations.

They cannot be always applicable to general use of writing instruments.

### Revision

2021/11/19 First version

2023-11-19 Second revision