

Issue Date 19-Oct-2022

Revision Date 19-Oct-2022

Version 4

**1. IDENTIFICATION****Product identifier****Product Name** THICKENING SHAMPOO 2.0**Other means of identification****Product Code** B2X701V04U**Recommended use of the chemical and restrictions on use****Recommended Use** Personal Care Product. For professional use only.**Uses advised against** All other uses. Not for personal use in this form or concentration.**Details of the supplier of the safety data sheet****Supplier Address**The Estée Lauder Companies Inc.  
125 Pinelawn Road  
Melville, NY 11747**Emergency telephone number****Company Phone Number** 1-877-311-3883**Emergency Telephone** Chemtrec 1-800-424-9300  
Chemtrec International +1 703-741-5970**E-mail address** SDS@ESTEE.COM**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label elements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Hazards not otherwise classified (HNOC)**

Not applicable

**Other Information**

Unknown acute toxicity 0 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

The product contains no substances which at their given concentration, are considered to be hazardous to health.

**4. FIRST AID MEASURES****Description of first aid measures**

|   |  |
|---|--|
| <b>General advice</b>                     | No hazards which require special first aid measures.   |
| <b>Eye contact</b>                        | If symptoms persist, call a physician.   |
| <b>Skin contact</b>                       | Wash with soap and water. In the case of skin irritation or allergic reactions see a physician.  |
| <b>Inhalation</b>                         | Remove to fresh air. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | Not an expected route of exposure. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately. |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required.   |

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

**Symptoms** None known.

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

**Note to physicians** Treat symptomatically.

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

**Unsuitable extinguishing media** None known.

**Specific hazards arising from the chemical**

None known.

**Explosion data**

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Enact facility's spill response plan. Wear protective gloves/protective clothing and eye/face protection.

**Environmental precautions**

**Environmental precautions** Prevent product from entering drains. Dispose of contents/container to an approved waste disposal plant.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Collect spillage.

**Methods for cleaning up** Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers upright and tightly closed when not in use.

**Incompatible materials** None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Control parameters**

**Exposure Guidelines** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

**Appropriate engineering controls**

**Engineering Controls** Eyewash stations. Showers. Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

**Physical state** LIQUID  
**Appearance** clear, viscous liquid  
**Odor** fresh, bergamot, cucumber, floral  
**Color** slight lavender to colorless

| <b><u>Property</u></b>               | <b><u>Values</u></b>     |
|--------------------------------------|--------------------------|
| <b>pH</b>                            | 5.85                     |
| <b>Melting point/freezing point</b>  | No information available |
| <b>Boiling point / boiling range</b> | No information available |
| <b>Flash point</b>                   | 94 °C / 201 °F           |
| <b>Burn rate</b>                     | Not applicable           |
| <b>Burn time</b>                     | Not applicable           |
| <b>Evaporation rate</b>              | No information available |
| <b>Flammability (solid, gas)</b>     | No information available |
| <b>Flammability Limit in Air</b>     |                          |
| <b>Upper flammability limit:</b>     | No information available |
| <b>Lower flammability limit:</b>     | No information available |
| <b>Vapor pressure</b>                | No information available |
| <b>Vapor density</b>                 | No information available |
| <b>Specific Gravity</b>              | 1.015                    |
| <b>Water solubility</b>              | No information available |
| <b>Solubility in other solvents</b>  | No information available |
| <b>Partition coefficient</b>         | No information available |
| <b>Autoignition temperature</b>      | No information available |
| <b>Decomposition temperature</b>     | No information available |

|                             |                          |
|-----------------------------|--------------------------|
| <b>Kinematic viscosity</b>  | 8500                     |
| <b>Dynamic viscosity</b>    | No information available |
| <b>Explosive properties</b> | No information available |
| <b>Oxidizing properties</b> | No information available |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

**10. STABILITY AND REACTIVITY****Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                            |                    |
|----------------------------|--------------------|
| <b>Product Information</b> | No data available  |
| <b>Inhalation</b>          | No data available. |
| <b>Eye contact</b>         | No data available. |
| <b>Skin contact</b>        | No data available. |
| <b>Ingestion</b>           | No data available. |

**Component Information**

Data within this section obtained from international chemical toxicological profiles.

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|                               |  |
|-------------------------------|--|
| <b>Sensitization</b>          | No information available.  |
| <b>Germ cell mutagenicity</b> | No information available.  |
| <b>Carcinogenicity</b>        | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP. |
| <b>Reproductive toxicity</b>  | No information available.  |

|                                 |                           |
|---------------------------------|---------------------------|
| <b>STOT - single exposure</b>   | No information available. |
| <b>STOT - repeated exposure</b> | No information available. |
| <b>Aspiration hazard</b>        | No information available. |

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity****Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

## 13. DISPOSAL CONSIDERATIONS

**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging**

Do not reuse container.

## 14. TRANSPORT INFORMATION

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

**ICAO (air)** Not regulated

**IATA** Not regulated

**UN/ID no.** Not Regulated

**Packing Group** Not Regulated

**IMDG** Not regulated

**RID** Not regulated

**ADR** Not regulated

**ADN** Not regulated

## 15. REGULATORY INFORMATION

**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations****U.S. State Right-to-Know Regulations****16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

Revision Date 19-Oct-2022

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

Issue Date 14-Aug-2023

Revision Date 14-Aug-2023

Version 1

**1. IDENTIFICATION****Product identifier****Product Name** THICKENING VOLUME CONDITIONER 3.0**Other means of identification****Product Code** B44R00M03U**Recommended use of the chemical and restrictions on use****Recommended Use** Personal Care Product. For professional use only.**Uses advised against** All other uses. Not for personal use in this form or concentration.**Details of the supplier of the safety data sheet****Supplier Address**The Estée Lauder Companies Inc.  
125 Pinelawn Road  
Melville, NY 11747**Emergency telephone number****Company Phone Number** 1-877-311-3883**Emergency Telephone** Chemtrec 1-800-424-9300  
Chemtrec International +1 703-741-5970**E-mail address** SDS@ESTEE.COM**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200)

**Label elements**

The product contains no substances which at their given concentration, are considered to be hazardous to health

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

Unknown acute toxicity 2 % of the mixture consists of ingredient(s) of unknown toxicity

**3. COMPOSITION/INFORMATION ON INGREDIENTS****Mixture**

| Chemical Name | CAS No.    | Weight-% |
|---------------|------------|----------|
| GLYCERIN      | 56-81-5    | 1 - 5*   |
| CETYL ALCOHOL | 36653-82-4 | 1 - 5*   |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

#### 4. FIRST AID MEASURES

##### Description of first aid measures

|   |  |
|---|--|
| <b>General advice</b>                     | No hazards which require special first aid measures.   |
| <b>Eye contact</b>                        | If symptoms persist, call a physician.   |
| <b>Skin contact</b>                       | Wash with soap and water. In the case of skin irritation or allergic reactions see a physician.  |
| <b>Inhalation</b>                         | Remove to fresh air. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | Not an expected route of exposure. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately. |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required.   |

##### Most important symptoms and effects, both acute and delayed

**Symptoms** None known.

##### Indication of any immediate medical attention and special treatment needed

**Note to physicians** Treat symptomatically.

#### 5. FIRE-FIGHTING MEASURES

##### Suitable extinguishing media

Dry chemical, CO<sub>2</sub>, alcohol-resistant foam or water spray.

**Unsuitable extinguishing media** None known.

##### Specific hazards arising from the chemical

None known.

##### Explosion data

**Sensitivity to Mechanical Impact** No information available.

**Sensitivity to Static Discharge** No information available.

##### Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

#### 6. ACCIDENTAL RELEASE MEASURES

##### Personal precautions, protective equipment and emergency procedures

**Personal precautions** Enact facility's spill response plan. Wear protective gloves/protective clothing and eye/face protection.

##### Environmental precautions

**Environmental precautions** Prevent product from entering drains. Dispose of contents/container to an approved waste disposal plant.

##### Methods and material for containment and cleaning up

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Collect spillage.

**Methods for cleaning up** Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

**Advice on safe handling** Handle in accordance with good industrial hygiene and safety practice. Ensure adequate ventilation, especially in confined areas. Do not eat, drink or smoke when using this product.

### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers upright and tightly closed when not in use.

**Incompatible materials** None known.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

**Exposure Guidelines** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical Name       | ACGIH TLV | OSHA PEL  | NIOSH IDLH |
|---------------------|-----------|---|------------|
| GLYCERIN<br>56-81-5 | -         | TWA: 15 mg/m <sup>3</sup> mist, total particulate<br>TWA: 5 mg/m <sup>3</sup> mist, respirable fraction | -          |

### Appropriate engineering controls

**Engineering Controls** Eyewash stations. Showers. Ventilation systems.

### Individual protection measures, such as personal protective equipment

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

**Physical state** LIQUID  
**Appearance** opaque emulsion  
**Odor** citrus, green, floral  
**Color** light tan to tan

| <u>Property</u>               | <u>Values</u>            |
|-------------------------------|--------------------------|
| pH                            | 4.2                      |
| Melting point/freezing point  | No information available |
| Boiling point / boiling range | No information available |
| Flash point                   | 94 °C / 201 °F           |
| Burn rate                     | Not regulated            |
| Burn time                     | Not regulated            |

|                              |                          |
|------------------------------|--------------------------|
| Evaporation rate             | No information available |
| Flammability (solid, gas)    | No information available |
| Flammability Limit in Air    |                          |
| Upper flammability limit:    | No information available |
| Lower flammability limit:    | No information available |
| Vapor pressure               | No information available |
| Vapor density                | No information available |
| Specific Gravity             | .995                     |
| Water solubility             | No information available |
| Solubility in other solvents | No information available |
| Partition coefficient        | No information available |
| Autoignition temperature     | No information available |
| Decomposition temperature    | No information available |
| Kinematic viscosity          | 44000                    |
| Dynamic viscosity            | No information available |
| Explosive properties         | No information available |
| Oxidizing properties         | No information available |

**Other Information**

|                  |                          |
|------------------|--------------------------|
| Softening point  | No information available |
| Molecular weight | No information available |
| VOC Content (%)  | No information available |
| Density          | No information available |
| Bulk density     | No information available |

**10. STABILITY AND REACTIVITY**

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

None known.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION**

**Information on likely routes of exposure**

|                     |                    |
|---------------------|--------------------|
| Product Information | No data available  |
| Inhalation          | No data available. |
| Eye contact         | No data available. |
| Skin contact        | No data available. |
| Ingestion           | No data available. |

**Component Information**

Data within this section obtained from international chemical toxicological profiles.

| <b>Chemical Name</b>        | <b>Oral LD50</b>      | <b>Dermal LD50</b>   | <b>Inhalation LC50</b>  |
|-----------------------------|-----------------------|----------------------|-------------------------|
| GLYCERIN<br>56-81-5         | = 12600 mg/kg ( Rat ) | > 10 g/kg ( Rabbit ) | > 2.75 mg/L ( Rat ) 4 h |
| CETYL ALCOHOL<br>36653-82-4 | > 5 g/kg ( Rat )      | -                    | -                       |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

**Sensitization** No information available.  
**Germ cell mutagenicity** No information available.  
**Carcinogenicity** This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.  
**Reproductive toxicity** No information available.  
**STOT - single exposure** No information available.  
**STOT - repeated exposure** No information available.  
**Target Organ Effects** Eyes, Respiratory system, kidney, Skin.  
**Aspiration hazard** No information available.

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

None known

**Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** Disposal should be in accordance with applicable regional, national and local laws and regulations.

**Contaminated packaging** Do not reuse container.

**14. TRANSPORT INFORMATION**

**DOT** Not regulated

**TDG** Not regulated

**MEX** Not regulated

|                      |               |
|----------------------|---------------|
| <u>ICAO (air)</u>    | Not regulated |
| <u>IATA</u>          | Not regulated |
| <u>UN/ID no.</u>     | Not Regulated |
| <u>Packing Group</u> | Not Regulated |
| <u>IMDG</u>          | Not regulated |
| <u>RID</u>           | Not regulated |
| <u>ADR</u>           | Not regulated |
| <u>ADN</u>           | Not regulated |

**15. REGULATORY INFORMATION**

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**U.S. State Right-to-Know Regulations**

| <b>Chemical Name</b> | <b>New Jersey</b> | <b>Massachusetts</b> | <b>Pennsylvania</b> |
|----------------------|-------------------|----------------------|---------------------|
| GLYCERIN<br>56-81-5  | X                 | X                    | X                   |

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

**Revision Date** 14-Aug-2023

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**

Issue Date 20-Nov-2023

Revision Date 20-Nov-2023

Version 12

**1. IDENTIFICATION****Product identifier****Product Name** THICKENING DRYSUN FINISH**Other means of identification****Product Code** B1MT00V06D**Recommended use of the chemical and restrictions on use****Recommended Use** Personal Care Product. For professional use only.**Uses advised against** All other uses. Not for personal use in this form or concentration.**Details of the supplier of the safety data sheet****Supplier Address**The Estée Lauder Companies Inc.  
125 Pinelawn Road  
Melville, NY 11747**Emergency telephone number****Company Phone Number** 1-877-311-3883**Emergency Telephone** Chemtrec 1-800-424-9300  
Chemtrec International +1 703-741-5970**E-mail address** SDS@ESTEE.COM**2. HAZARDS IDENTIFICATION****Classification****OSHA Regulatory Status**

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

|                           |                |
|---------------------------|----------------|
| Skin corrosion/irritation | Category 2     |
| Flammable aerosols        | Category 2     |
| Gases under pressure      | Compressed gas |

**Label elements****Warning****Hazard statements**

Causes skin irritation

Flammable aerosol

Contains gas under pressure; may explode if heated

**Precautionary Statements - Prevention**

Keep away from heat/sparks/open flames/hot surfaces. — No smoking

Do not spray on an open flame or other ignition source  
Pressurized container: Do not pierce or burn, even after use

**Precautionary Statements - Storage**

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

**Hazards not otherwise classified (HNOC)**

Not regulated

**Other Information**

Unknown acute toxicity 47 % of the mixture consists of ingredient(s) of unknown toxicity

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

**Mixture**

| Chemical Name          | CAS No.  | Weight-% |
|------------------------|----------|----------|
| HYDROFLUOROCARBON 152A | 75-37-6  | 30 - 60* |
| DIMETHYL ETHER         | 115-10-6 | 15 - 40* |
| ALCOHOL DENAT.         | 64-17-5  | 10 - 30* |
| FRAGRANCE (PARFUM)     | NOCAS    | <0.1*    |

\*The exact percentage (concentration) of composition has been withheld as a trade secret.

### 4. FIRST AID MEASURES

**Description of first aid measures**

|   |  |
|---|--|
| <b>General advice</b>                     | No hazards which require special first aid measures.   |
| <b>Eye contact</b>                        | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.                        |
| <b>Skin contact</b>                       | Wash with soap and water. In the case of skin irritation or allergic reactions see a physician.  |
| <b>Inhalation</b>                         | Remove to fresh air. If symptoms persist, call a physician.  |
| <b>Ingestion</b>                          | Not an expected route of exposure. Clean mouth with water and drink afterwards plenty of water. Call a physician or poison control center immediately. |
| <b>Self-protection of the first aider</b> | Use personal protective equipment as required.   |

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

**Symptoms** None known.

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

**Note to physicians** Treat symptomatically.

### 5. FIRE-FIGHTING MEASURES

**Suitable extinguishing media**

Use CO<sub>2</sub>, dry chemical, or foam.

**Unsuitable extinguishing media** CAUTION: Use of water spray when fighting fire may be inefficient.

**Specific hazards arising from the chemical**

Sealed containers may rupture when heated.

**Explosion data****Sensitivity to Mechanical Impact** No information available.**Sensitivity to Static Discharge** No information available.**Protective equipment and precautions for firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Enact facility's spill response plan. Remove all sources of ignition. Ensure adequate ventilation, especially in confined areas. Wear protective gloves/protective clothing and eye/face protection.

**Environmental precautions**

**Environmental precautions** Prevent product from entering drains. Dispose of contents/container to an approved waste disposal plant.

**Methods and material for containment and cleaning up**

**Methods for containment** Prevent further leakage or spillage if safe to do so. Dike to collect large liquid spills. Collect spillage.

**Methods for cleaning up** Clean contaminated surface thoroughly.

**7. HANDLING AND STORAGE****Precautions for safe handling**

**Advice on safe handling** Keep away from heat/sparks/open flames/hot surfaces. - No smoking. All equipment used when handling the product must be grounded. Take precautionary measures against static discharges. Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Ensure adequate ventilation, especially in confined areas. Do not eat, drink or smoke when using this product.

**Conditions for safe storage, including any incompatibilities**

**Storage Conditions** Keep tightly closed in a dry and cool place. Keep in properly labeled containers. Keep containers upright and tightly closed when not in use.

**Incompatible materials** Incompatible with oxidizing agents.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION****Control parameters**

**Exposure Guidelines** The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

| Chemical Name             | ACGIH TLV      | OSHA PEL                                     | NIOSH IDLH   |
|---------------------------|----------------|--|--|
| ALCOHOL DENAT.<br>64-17-5 | STEL: 1000 ppm | TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup> | IDLH: 3300 ppm<br>TWA: 1000 ppm<br>TWA: 1900 mg/m <sup>3</sup> |

NIOSH IDLH *Immediately Dangerous to Life or Health*

**Appropriate engineering controls**

**Engineering Controls** Eyewash stations. Showers. Ventilation systems.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin and body protection** Wear protective gloves and protective clothing.

**Respiratory protection** In case of insufficient ventilation, wear suitable respiratory equipment.

**General Hygiene Considerations** Handle in accordance with good industrial hygiene and safety practice. Regular cleaning of equipment, work area and clothing is recommended.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Information on basic physical and chemical properties**

|                       |                 |
|-----------------------|-----------------|
| <b>Physical state</b> | Aerosol         |
| <b>Appearance</b>     | opaque liquid   |
| <b>Odor</b>           | characteristic, |
| <b>Color</b>          | off white       |

| <u>Property</u>                      | <u>Values</u>            |
|--------------------------------------|--------------------------|
| <b>pH</b>                            | No information available |
| <b>Melting point/freezing point</b>  | No information available |
| <b>Boiling point / boiling range</b> | No information available |
| <b>Flash point</b>                   | Not regulated 63         |
| <b>Burn rate</b>                     | Not regulated            |
| <b>Burn time</b>                     | Not regulated            |
| <b>Evaporation rate</b>              | No information available |
| <b>Flammability (solid, gas)</b>     | No information available |
| <b>Flammability Limit in Air</b>     |                          |
| <b>Upper flammability limit:</b>     | No information available |
| <b>Lower flammability limit:</b>     | No information available |
| <b>Vapor pressure</b>                | No information available |
| <b>Vapor density</b>                 | No information available |
| <b>Specific Gravity</b>              | .865                     |
| <b>Water solubility</b>              | No information available |
| <b>Solubility in other solvents</b>  | No information available |
| <b>Partition coefficient</b>         | No information available |
| <b>Autoignition temperature</b>      | No information available |
| <b>Decomposition temperature</b>     | No information available |
| <b>Kinematic viscosity</b>           | No information available |
| <b>Dynamic viscosity</b>             | No information available |
| <b>Explosive properties</b>          | No information available |
| <b>Oxidizing properties</b>          | No information available |

**Other Information**

|                         |                          |
|-------------------------|--------------------------|
| <b>Softening point</b>  | No information available |
| <b>Molecular weight</b> | No information available |
| <b>VOC Content (%)</b>  | No information available |
| <b>Density</b>          | No information available |
| <b>Bulk density</b>     | No information available |

## 10. STABILITY AND REACTIVITY

**Reactivity**

No data available

**Chemical stability**

Stable under recommended storage conditions.

**Possibility of Hazardous Reactions**

None under normal processing.

**Conditions to avoid**

Extremes of temperature and direct sunlight.

**Incompatible materials**

Incompatible with oxidizing agents.

**Hazardous Decomposition Products**

None known based on information supplied.

**11. TOXICOLOGICAL INFORMATION****Information on likely routes of exposure**

|                            |                    |
|----------------------------|--------------------|
| <b>Product Information</b> | No data available  |
| <b>Inhalation</b>          | No data available. |
| <b>Eye contact</b>         | No data available. |
| <b>Skin contact</b>        | No data available. |
| <b>Ingestion</b>           | No data available. |

**Component Information**

Data within this section obtained from international chemical toxicological profiles.

| Chemical Name              | Oral LD50            | Dermal LD50 | Inhalation LC50          |
|----------------------------|----------------------|-------------|--------------------------|
| DIMETHYL ETHER<br>115-10-6 | -                    | -           | = 164000 ppm ( Rat ) 4 h |
| ALCOHOL DENAT.<br>64-17-5  | = 7060 mg/kg ( Rat ) | -           | = 124.7 mg/L ( Rat ) 4 h |

**Information on toxicological effects**

**Symptoms** No information available.

**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

|                                 |   |
|---------------------------------|---|
| <b>Sensitization</b>            | No information available.   |
| <b>Germ cell mutagenicity</b>   | No information available.   |
| <b>Carcinogenicity</b>          | This product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.  |
| <b>Reproductive toxicity</b>    | No information available.   |
| <b>STOT - single exposure</b>   | No information available.   |
| <b>STOT - repeated exposure</b> | No information available.   |
| <b>Chronic toxicity</b>         | May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects. Contains a known or suspected reproductive toxin. |
| <b>Target Organ Effects</b>     | blood, Reproductive System, Central nervous system, Eyes, Respiratory system, liver, Skin.  |
| <b>Aspiration hazard</b>        | No information available.   |

**Numerical measures of toxicity - Product Information**

The following values are calculated based on chapter 3.1 of the GHS document .

**12. ECOLOGICAL INFORMATION****Ecotoxicity****Persistence and degradability**

No information available.

**Bioaccumulation**

No information available.

**Other adverse effects**

No information available

**13. DISPOSAL CONSIDERATIONS**

**Waste treatment methods**

**Disposal of wastes** This material, as supplied, is a hazardous waste according to federal regulations (40 CFR 261).

**Contaminated packaging** Do not reuse container.

**14. TRANSPORT INFORMATION**

**DOT**

**UN/ID no.** UN1950  
**Proper shipping name** Aerosols  
**Hazard Class** 2.1  
**Special Provisions** N82  
**Description** UN1950, Aerosols, 2.1  
**Emergency Response Guide Number** 126

**TDG**

**UN/ID no.** UN1950  
**Proper shipping name** Aerosols  
**Hazard Class** 2.1  
**Description** UN1950, Aerosols, 2.1

**MEX**

**UN/ID no.** UN1950  
**Proper shipping name** Aerosols  
**Hazard Class** 2  
**Description** UN1950, Aerosols, 2

**ICAO (air)**

**UN/ID no.** UN1950  
**Proper shipping name** Aerosols  
**Hazard Class** 2.1  
**Special Provisions** A145, A167  
**Description** UN1950, Aerosols, 2.1

**IATA**

**UN/ID no.** UN1950  
**Hazard Class** 2.1  
**ERG Code** 10L  
**Special Provisions** A145, A167, A802  
**Description** UN1950, Aerosols, flammable, 2.1

**IMDG**

**UN/ID no.** UN1950  
**Hazard Class** 2  
**EmS-No.** F-D, S-U  
**Special Provisions** 63,190, 277, 327, 344, 959  
**Description** &UN1950, &, 2

**RID**

UN/ID no. UN1950  
 Proper shipping name Aerosols  
 Hazard Class 2.1  
 Classification code 5F  
 Description UN1950, Aerosols, 2.1  
 Labels 2.1

**ADR**

UN/ID no. UN1950  
 Proper shipping name Aerosols  
 Hazard Class 2.1  
 Classification code 5F  
 Tunnel restriction code (D)  
 Special Provisions 190, 327, 344, 625  
 Description UN1950, Aerosols, 2.1, (D)  
 Labels 2.1

**ADN**

UN/ID no. UN1950  
 Proper shipping name Aerosols  
 Hazard Class 2.1  
 Classification code 5F  
 Special Provisions 190, 327, 344, 625  
 Description UN1950, Aerosols, 2.1  
 Hazard label(s) 2.1  
 Limited quantity (LQ) 1 L  
 Ventilation VE01, VE04

**15. REGULATORY INFORMATION**

**US Federal Regulations**

**SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

**CWA (Clean Water Act)**

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

**CERCLA**

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

**US State Regulations**

**U.S. State Right-to-Know Regulations**

| Chemical Name                     | New Jersey | Massachusetts | Pennsylvania |
|-----------------------------------|------------|---------------|--------------|
| HYDROFLUOROCARBON 152A<br>75-37-6 | X          | X             | -            |
| DIMETHYL ETHER<br>115-10-6        | X          | X             | X            |
| ALCOHOL DENAT.<br>64-17-5         | X          | X             | X            |

**16. OTHER INFORMATION, INCLUDING DATE OF PREPARATION OF THE LAST REVISION**

Revision Date 20-Nov-2023

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**End of Safety Data Sheet**