



三帕认证

Material Safety Data Sheet

Product Name: Rechargeable Polymer Li-ion Cell

Model: GT PO702535

Revision Date: Dec. 30, 2019

Effective Date: Jan. 01, 2020

Report No.: DGGT20191202MSDS01

Compiler: Tracy Chen

Reviewer: Andy Li

Approver: Leo Chi



Guangzhou CP-UP Certification Technology Service Co., Ltd.





Material Safety Data Sheet

SECTION 1 - CHEMICAL AND COMPANY IDENTIFICATION

Name of Sample: Rechargeable Polymer Li-on Cell	Model and Ratings: GT PO702535, 3.7V, 650mAh ,2.405Wh
Company: Dongguan guante electronics technology Co ., Ltd.	Address: Hengtai Industrial Building, Dongcheng Middle Road, Guancheng District, Dongguan City
Zip code: 523000	Fax: /
E-mail: 188658248@qq.com	Emergency Telephone: 0769-23102849

SECTION2 – HAZARDS IDENTIFICATION

Hazards Identification:

The battery has passed the test items of UN Model Regulations, Manual of Test and Criteria Section UN38.3

Emergency Overview:

Caution: Avoid contact and inhalation the electrolyte contained inside the battery.

SECTION3 – COMPOSITION/INFORMATION ON INGREDIENT

Ingredient	CAS No.	Concentration (%)
Lithium Cobalt Oxide	12190-79-3	35.5
Graphite	7782-42-5	18
Polyvinylidene Fluoride	24937-79-9	1
SBR	9003-55-8	1.5
Copper Foils	7440-50-8	15
Aluminum Foils	7429-90-5	9
Lithium hexafluorophosphate	21324-40-3	2.8
Ethylene carbonate	96-49-1	5
Dimethyl carbonate	616-38-6	5
Ethyl methyl carbonate	623-53-0	5
Nickel	7440-02-0	2.2



SECTION 4 – FIRST AID MEASURES

Eye Exposure:

In case of contact with eyes, flush with copious of water for at least 15 minutes. Assure adequate flushing by separating the eyelids with fingers. Call a physician.

Skin Exposure:

If the internal battery materials of an opened battery cell come into contact with skin, immediately flush with plenty of water.

Inhalation Exposure:

If inhaled the internals of battery vomiting. Seeking Immediate medical attention.

Ingestion Exposure:

If swallowed, do not induce vomiting. Seek immediate medical attention.

SECTION 5 – FIRE FIGHTING MEASURES

Danger characteristic:

Exposure to excessive heat can cause venting of the liquid electrolyte. Battery may burst and release hazardous decomposition products when exposed to a fire situation.

Hazardous combustion products:

Corrosive gas may be emitted during fire.

Fire-Fighting method& media

The stuff must equip with filtermask (full mask) or isolated breathing apparatus. The stuff must wear the clothes which can defense the fire in the upwind direction. Remove the container to the open space as soon as possible. Spray water on the containers in the fireplace to keep them cool until finish extinguishment
Media: plenty of water, dry chemical powder or carbon dioxide.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Emergency treatment:

If the battery material is released, remove personnel from area until fumes dissipate. Provide maximum ventilation to clear out hazardous gases. The preferred response is to leave the area and allow the batteries to cool and vapors to dissipate. Provide maximum ventilation. Avoid skin and eye contact or inhalation of vapors. Remove spilled liquid with absorbent and incinerate waste.

SECTION 7 – HANDLING AND STORAGE

Handling:

1. Do not allow battery terminates to contact each other, or contact with other metals.
2. Do not put the cell or battery into a fire or heat it. Do not solder the cell directly. Do not use or leave the cell or battery in a place near fire or heaters.
3. Do not expose the battery to excessive physical shock or vibration.
- 4 Do not immerse, throw, and wet a battery in water.
- 5 Short-circuiting should be avoided. Short circuit will reduce the life of the battery and can lead to ignition of surrounding materials. Physical contact with to short- circuited battery can cause skin burn.
6. The batteries should not be opened, destroyed or incinerate, since they may leak or rupture and release to the environment the ingredients that they contain in the hermetically sealed container.
7. Place the cell beyond the child packing and container.
8. Do not connect the battery directly to an electric outlet or cigarette socket in a car.
9. Be sure to use the specified charger for battery, and follow the charging instructions correctly.
10. Do not mix old and new batteries together, neither with Ni-Cd, dry batteries or another manufacturer



batteries or product.

Storage:

1. Batteries should be separated from other materials and stored in a noncombustible, well ventilated, sprinkler-protected structure with sufficient clearance between walls and battery stacks.
2. Keep the sample in the cool, dry and well-ventilated place (temperature: -20~30degree C humidity:45~85%). Do not exposure to direct sunlight for long periods. Keep away from fire and heating sources. Don't keep the samples with oxidizer and acid.
3. charge the battery every 6 months to the amount specified by the manufacture, even if the battery is not used.
4. Equip with relevant types and quantities of the extinguishment instruments. The storage place should be equipped with suitable shelter materials for divulgence handling.

SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION

Engineering Control:

Keep away from heat and open flame. Supply with sufficient partial air exhaust. Store in a cool, dry place.

Respiratory Protection:

Not necessary under conditions of normal use. Wear self-contained breathing filtermask if the density exceed in the air. Wear breathing apparatus under the condition of emergency rescue or evacuation.

Eyes Protection:

Not necessary under conditions of normal use. Wear protective glasses if handling a leaking or ruptured battery.

Skin and Body Protection:

Not necessary under conditions of normal use. Wear fireproofing, gas defense clothes in case of handling a leaking or ruptured battery.

Hands Protection:

Not necessary under conditions of normal use. Wear chemical resistant rubber.

Other Protections:

No smoking, dining and drinking water in the workplace. Keep good habit of hygiene.

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Silver

Physical state:

Solid

Form:

Prismatic

Odor:

Odorless

Solubility:

Insoluble in water.

SECTION 10 – STABILITY AND REACTIVITY

Stability:

Stable under normal temperature and pressure.



Distribution of Ban:
Strong oxidizer, strong acid and corrosives
Conditions to Avoid:
Fire source, heating source, disassemble, external short circuit, crushes, deformation, high temperature above 100°C, direct sunlight and high humidity, immerse in water or overcharge.
Hazardous Polymerization:
Will not occur.
Hazardous Decomposition Products:
Metal oxides, CO, CO ₂

SECTION 11 – TOXICOLOGICAL INFORMATION

Acute Toxicity:
N/A
Sub-acute and Chronic Toxicity:
N/A
Irritation Data:
The internal battery materials may cause irritation to eyes and skin.
Sensitization:
Lithium transition metal oxidate-Li(M)m(O)n: the nervous system of respiratory organs may be stimulated sensitively
Copper: Sensitization of the skin may be caused by the long-term or repetitive contact.
Mutagenicity:
No information is available.
Carcinogenicity:
No information is available.
Others:
Since the materials in this battery are sealed in the can, the potential for exposure to the components of the battery is negligible, when the battery is used as directed. However technical or electrical abuse of the battery may result in the release of battery contents.

SECTION 12 – ECOLOGICAL INFORMATION

Eco-toxicity:
No data available.
Biodegradable:
No data available.
Mobility in soil:
No data available.
Bioconcentration or biological accumulation:
No data available.
Other harmful effects:
Don't abandon the battery into environment, may cause water or soil pollution.

SECTION 13 - DISPOSAL CONSIDERATIONS

**Appropriate Method of Substance:**

The battery should be completely discharged prior to disposal in order to prevent short circuit. The battery contains recyclable materials. It is suggested recycle. Refer to National or Local regulations before handling. Disposal of the battery should be performed by permitted, professional disposal firms knowledgeable in National or Local regulations of hazardous waste treatment and hazardous waste transportation.

SECTION 14 – TRANSPORT INFORMATION

IATA:	Proper Shipping Name: Lithium ion batteries/packed with equipment/contained in equipment
	UN Number: UN3480/UN3481
	The battery has passed the test items of UN Model Regulations, Manual of Tests and Criteria, Part III, sub-section 38.3. According to IATA DGR 61 st Edition, PACKING INSTRUCTION 965 ~ 967 of section II or IB for transportation.
IMO:	Proper Shipping Name: Lithium ion batteries/packed with equipment/contained in equipment
	UN Number: UN3480/UN3481
	The battery has passed the test items of UN Model Regulations, Manual of Tests and Criteria, Part III, sub-section 38.3. The goods is not restricted to IMO IMDG Code (Amend 39-18) according to special provision188.

SECTION 15 – REGULATORY INFORMATION**US DOT:**

Effective December 29,2004, the DOT requires that the outside of each package the contains primary lithium batteries, regardless of size of number of batteries, batteries, be labeled with the following statement:” PRIMARY LITHIUM BATTERIES-FOBIDDEN FOR TRANSPORT ABOARD PASSENGER AIRCRAFT”, The labeling requirement covers shipments via highway, rail vessel or cargo-only aircraft and covers all shipment inside, into or out of the US. The label must be in contrasting color and the letters must be 12mm (0.5 in) in height for packages weighing more than 30Kg and 6mm (0.25 in) in height for packages weighting less than 30Kg.

SECTION 16 – ADDITIONAL INFORMATION**Date:**

2019-12-30

Department:

Guangzhou CP-UP Certification Technology Service Co., Ltd.
No.1, Aigang 7th Lane, Yunxing Zhukeng Village, Shiqiao Street, Panyu District, Guangzhou City,China
Tel.: 0086-20-31127037
WEB: www.cp-up.com
Email: info@cp-up.com



Other Information:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. We make no warranty of merchantability or any other warranty express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes. In no way shall we be liable for any claims, losses, or damage of any third party or for lost profits or any special, indirect, consequential or exemplary damages arising from using the above information.

Safety Data Sheet

29 CFR 1910.1200

Effective Date : 01/01-2025

Trade Name : Zinc Chloride Dry Battery (No Lead Added)

1 Identification

• Product identifier

• Trade name : Zinc Chloride Dry Battery (No Lead Added)

• Item No.:

SUM1/EXTRA、SUM1/SUPER、SUM2/EXTRA、SUM2/SUPER、SUM3/EXTRA、SUM3/SUPER、SUM4/EXTRA、SUM4/SUPER、SUM5/EXTRA、SUM9V/EXTRA、SUM9V/SUPER

• Recommended use of the chemical and restrictions on use :

• Application of the substance / the preparation : Electronic products

• Details of the supplier of the safety data sheet

• Manufacturer/Supplier :

CHUNG PAK BATTERY WORKS LIMITED

CHUNG PAK (GUANG DONG) BATTERY INDUSTRIAL CO., LTD

• Full address :

UNIT B, 2/F., WAH SHUN INDUSTRIAL BUILDING, No.4 CHO YUEN STREET, YAU TONG BAY, KOWLOON, HONGKONG

GANCUN SECTION FOCHEN ROAD CHEN CUN COUNTY SHUNDE DISTRICT

FOSHAN CITY GUANGDONG PROVINCE CHINA

• Phone number :

852-27171338

Fax : 852 2772 7727

• Email : vinnic@chungpak.com

• Other US contact point : No available

• Further information obtainable from :

CHUNG PAK BATTERY WORKS LIMITED

CHUNG PAK (GUANG DONG) BATTERY INDUSTRIAL CO., LTD

• Emergency telephone number :

USA Poison Center Tel: +1 800 222 1222

+86-757-23312338 Bobo

• Remark :

*This sample is likely to be classified as article and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference only.

2 Hazard(s) identification

• Classification of the substance or mixture

Classification according to OSHA Hazard Communication Standard (29 CFR 1910.1200)



GHS05 Corrosion

Skin Corr.

1A

H314

Causes severe skin burns and eye damage.

Eye Dam.

1

H318

Causes serious eye damage.



GHS07

Acute Tox.

4

H302

Harmful if swallowed.

Acute Tox.

4

H332

Harmful if inhaled.

• Information concerning particular hazards for human and environment :

The product has to be labeled due to the calculation procedure of OSHA Hazard Communication Standard (29 CFR 1910.1200).

• Classification system :

The classification is according to the latest edition of OSHA Hazard Communication Standard (29 CFR 1910.1200), and extended by company and literature data.

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• Label elements

• Labeling according to OSHA Hazard Communication Standard (29 CFR 1910.1200)

• Hazard pictograms



GHS05 GHS07

• Signal word : Danger

• Hazard-determining components of labeling :

manganese dioxide

• Hazard statements

H302+H332 Harmful if swallowed or if inhaled.

H314 Causes severe skin burns and eye damage.

• Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P103 Read label before use.

P260 Do not breathe dusts or mists.

P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a poison center/doctor.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local / regional / national / international regulations.

• Hazards not otherwise classified (HNOC) No further relevant information available.

3 Composition / information on ingredients

• Chemical characterization: Mixtures

• Description:

Mixture of the substances listed below with nonhazardous additions.

For the wording of listed risk phrases refer to section 16.

• Composition:		
1313-13-9	manganese dioxide  Acute Tox.4, H302; Acute Tox. 4, H332	22.8-25.7%
7439-89-6	iron	17.4-23.8%
7440-66-6	zinc	16.8-19.3%
7732-18-5	water	14.1-16.2%
1333-86-4	carbon black	11.1-15.5%
7646-85-7	zinc chloride	5.3-5.8%
12125-02-9	ammonium chloride	0.02-0.25%
9004-34-6	Cellulose	0.6-0.74%
9002-88-4	PE	0.97-1.26%
9003-07-0	PP	0.14-0.17%
9002-86-2	PVC	0.77-1.28%

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• Remark :

zinc (CAS: 7440-66-6)

Note: Zn

manganese dioxide (CAS: 1313-13-9)

Note: MnO₂

carbon black (CAS: 1333-86-4)

Note: C

iron (CAS: 7439-89-6)

Note: Fe

zinc chloride (CAS: 7646-85-7)

Note: ZnCl₂

ammonium chloride (CAS: 12125-02-9)

Note: NH₄Cl₂

water (CAS: 7732-18-5)

Note: H₂O

Cellulose (CAS: 9004-34-6)

Note: Paper

Polyethylene (CAS: 9002-88-4)

Note: PE

Polypropylene(CAS: 9003-07-0)

Note: PP

Polyvinyl chloride (CAS: 9002-86-2)

Note: PVC

4 First-aid measures

• Description of first aid measures

• General description:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

• After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

In case of unconsciousness place patient stably in side position for transportation.

• After skin contact: Immediately wash with water and soap and rinse thoroughly. Then consult a doctor.

• After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

• After swallowing:

Do not induce vomiting; immediately call for medical help.

Drink copious amounts of water and provide fresh air. Immediately call a doctor.

• Most important symptoms and effects, both acute and delayed No further relevant information available.

• Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

• Suitable extinguishing agents:

CO₂、extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

• Special hazards arising from the substance or mixture: No further relevant information available.

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- **Special protective equipment and precautions for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures:**
Wear protective equipment. Keep unprotected persons away.
- **Environmental precautions:** Do not allow to enter sewers/surface or ground water.
- **Methods and material for containment and cleaning up:**
Use neutralizing agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

7 Handling and storage

- **Precautions for safe handling:**
Thorough dedusting.
Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:** No special measures required.
- **Storage:**
- **Conditions for safe storage, including any incompatibilities**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Keep receptacle tightly sealed.
- **Specific end use(s):** No further relevant information available.

8 Exposure controls / personal protection

- **Components with limit values that require monitoring at the workplace:**

1313-13-9 manganese dioxide (22.8-25.7%)

PEL (USA)	Ceiling limit value: 5mg/m ³ as Mn
REL (USA)	Short-term value: 3mg/m ³ Long-term value: 1mg/m ³ as Mn
TLV (USA)	Long-term value: 0.02*0.1* mg/m ³ as Mn; * respirable **inhalable fraction

9004-34-6 Cellulose (0.6-0.74%)

PEL (USA)	Long-term value: 15* 5** mg/m ³ *total dust **respirable fraction
REL (USA)	Long-term value: 10* 5** mg/m ³ *total dust **respirable fraction
TLV(USA)	Long-term value: 10mg/m ³

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- **Additional information:** The lists that were valid during the creation were used as basis.
- **Based on the composition shown in Section 3, the following measures are suggested for occupational safety measure.**
- **Appropriate engineering controls:**
 - Wash clothing and shoes before reuse.
 - Keep away from foodstuffs, beverages and feed.
 - Immediately remove all soiled and contaminated clothing.
 - Wash hands before breaks and at the end of work.
 - Avoid contact with the eyes and skin.
 - See Section 7 for information about design of technical facilities.
- **Personal protective equipment:**
- **Breathing equipment:**
 - In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- **Protection of hands :**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

- **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

- **Penetration time of glove material:**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:**



Tightly sealed goggles

9 Physical and chemical properties

- **General Information**

- **Appearance:**

Form: Cylindrical
Color: Black, Red

- **Odor:** Odorless

- **Odour threshold:** Not available

- **pH-value:** Not available

- **Change in condition**

Melting point/ Melting range: Not available

Freezing point: Not available

Boiling point/ Boiling range: Not available

- **Flash point:** Not available

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• Flammability (solid, gaseous):	Not available
• Auto-Ignition temperature:	Not available
• Decomposition temperature:	Not available
• Explosion limits:	
Lower:	Not available
Upper:	Not available
• Vapor pressure:	Not available
• Density:	Not available
• Relative density:	Not available
• Vapour density:	Not available
• Evaporation rate:	Not available
• Solubility in/ Miscibility with	
Water:	Not available
• Partition coefficient (n-octanol/water)	Not available
• Viscosity:	
Dynamic:	Not available
Kinematic:	Not available
• Other information	Voltage 1.5V

10 Stability and reactivity

- **Reactivity:** Data not available
- **Chemical stability:** Stable under normal operating and storage conditions.
- **Possibility of hazardous reactions:** No dangerous reactions known.
- **Conditions to avoid:** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known.

11 Toxicological information

• Acute toxicity:

• LD/LC50 values that are relevant for classification:		
7439-89-6 iron		
Oral	LD50	30000 mg/kg (rat)
9004-34-6 Cellulose		
Oral	LD50	>5000 mg/kg (rat)

• **Primary irritant effect:**

- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitization:** No sensitizing effects known.

• **Additional toxicological information:**

The product shows the following dangers according to internally approved calculation methods for preparations:

Harmful

Corrosive

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Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

• Carcinogenic categories

• IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

• NTP (National Toxicology Program)

None of the ingredients is listed.

• OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

• Toxicity

• **Aquatic toxicity:** No further relevant information available.

• **Persistence and degradability:** No further relevant information available.

• **Bioaccumulative potential:** No further relevant information available.

• **Mobility in soil:** No further relevant information available.

• **Other adverse effects:** No further relevant information available.

13 Disposal considerations

• Waste treatment methods

• Recommendation:

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

• Uncleaned packagings:

• **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

• Zinc Chloride Dry Battery (No Lead Added) is exempt from dangerous goods. It is considered non-dangerous goods by the international Civil Aviation Organization (ICAO), the International Air Transport Association (IATA), International Maritime Dangerous Goods regulations (IMDG), the 《Recommendations on the Transport of Dangerous Goods Model Regulations》 and also is not classified as dangerous goods under the 66th Edition of the IATA Dangerous Goods Regulation 2025 Special Provision A123.

Separate batteries when shipping to prevent short-circuiting. They should be packed in strong packaging for support during transport.

Transport Fashion: By air, by sea, by road.

15 Regulatory information

• **Safety, health and environmental regulations/legislation specific for the substance or mixture**

• Sara

• Section 335 (extremely hazardous substances):

None of the ingredients is listed.

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• Section 313 (specific toxic chemical listings):

1313-13-9	manganese dioxide
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• TSCA (Toxic Substances Control Act):

1313-13-9	manganese dioxide
7439-89-6	iron
7732-18-5	water
9004-34-6	Cellulose

• Proposition 65

• Chemical known to cause cancer:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for females:

None of the ingredients is listed.

• Chemicals known to cause reproductive toxicity for males:

None of the ingredients is listed.

• Chemicals known to cause developmental toxicity:

None of the ingredients is listed.

• Cancerogenity categories

• EPA (Environmental Protection Agency)

1313-13-9	manganese dioxide	D
7440-66-6	zinc	II

• TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

• NIOSH-Ca (National Institution for Occupational Safety & Health)

None of the ingredients is listed.

16 Other information

NFPA ratings (scale 0-4)



Health = 3
Fire = 0
Reactivity = 0

• HMIS ratings (scale 0-4)



Health = 4
Fire = 0
Reactivity = 0

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• Relevant phrases

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H332 Harmful if inhaled.

• *****

The contents and format of this SDS are in accordance with 29 CFR 1910.1200 (g)

DISCLAIMER OF LIABILITY

The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in anyway connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable.

Remark:

*This sample is likely to be classified as article and is out of scope of a SDS as set out in 29 CFR Part 1910.1200. This SDS is generated for client's reference only.

• Date of preparation/last revision 2025.01.01/-

• Abbreviations and acronyms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam . 1: Serious eye damage/eye irritation, Hazard Category 1

• *****

End of document