

# Safety Data Sheet (SDS)

In accordance with OSHA HCS 2012

## Section 1 - Chemical Product and Company Identification

### 1.1 Product Identification:

Product Name: MESG Metallic Epoxy Part A  
Product Model: /

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

Identified uses: Paint  
Use advised against: No data available.

### 1.3 Details of the Manufacture or supplier

Manufacture: MESG Products Pte. Ltd.  
Address: 3 Ang Mo Kio Street 62, Link@AMK, #01-28, Singapore (569139)  
Telephone: +65 6902 3188  
Fax: +65 6983 4388  
Email: support@mesgshop.com

### 1.4 Emergency telephone number

Emergency Telephone: +65 8788 7076

## Section 2 - Hazards Identification

### 2.1 Classification of the substance or mixture

**GHS Classification:** Skin irritation, category 2  
Skin Sensitization, category 1  
Eye irritation, category 2A  
Hazardous to the aquatic environment-Chronic hazard, category 2

### 2.2 GHS Label elements, including precautionary statements

**GHS Labels:**

**Pictogram(s):****Signal Word:**

Warning

**Hazard Statement:**

H315: Causes skin irritation

H317: May cause an allergic skin reaction.

H319: Causes serious eye damage

H411: Toxic to aquatic life with long lasting effects

**Precautionary statement(s)****Prevention precautionary statements:**

P261: Avoid breathing dust/fume/gas/mist/vapours/spray.

P264: Wash thoroughly after handling.

P272: Contaminated work clothing should not be allowed out of the workplace

P273: Avoid release to the environment

P280: Wear protective gloves/protective clothing/eye protection/face protection

**Response Precautionary****Statements:**

P302+352: IF ON SKIN: Wash with soap and water

P333+313: If skin irritation or a rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse .

P305+P351+P338: If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do, continue rinsing.

P337+313: If eye irritation persists get medical advice/attention

**Storage Precautionary****Statements:**

None.

**Disposal Precautionary****Statements:**

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

**2.3 Description of any hazards not otherwise classified**

None. See section 11 for more detailed information on health effects and symptoms.

**Section 3 - Composition/Information on Ingredient**

Substance ( ) Preparation (✓) Article ( )

Chemical name	CAS No.	Content (%)
Reaction products of Epichlorohydrin and Bisphenol A	25085-99-8	Approximately 95%
Benzyl Alcohol	100-51-6	Approximately 5%

Abbreviation: CAS No. is Chemical Abstract Service Registry Number.

## Section 4 - First Aid Measures

### 4.1 Description of first aid measures:

**Eye Contact:** Rinse cautiously with water for several minutes, occasionally lifting the upper and lower eyelids. Remove contact lenses, if present and easy to do, continue rinsing. Seek medical attention immediately.

**Skin Contact:** Immediately remove and isolate contaminated clothing and shoes. Wash off with soap and plenty of water. If irritation or a rash occurs and persists, contact a doctor. Wash contaminated clothing before reuse.

**Inhalation:** If feel unwell, Remove victim to fresh air and keep at rest in a position comfortable for breathing. If breathing is difficult, give oxygen. Get medical attention if symptoms develops or persists.

**Ingestion:** If the person is conscious, wash out mouth with water. Never give anything by mouth to an unconscious person. Consult a physician attention and go to hospital immediately.

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

Irritant effects, sensitizing effects. The most important known symptoms and effects are described in the labeling (see section 2.2) and/or in section 11.

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

Treat symptomatically and supportively.

## Section 5 -Extinguishing media

### 5.1 Extinguishing media

**Suitable extinguishing media:** Use alcohol-resistant foam, dry powder or carbon dioxide. Use water fog to cool the unopened containers involved in fire.

**Unsuitable extinguishing media:** Do not use a solid water stream as it may scatter or spread fire.

### 5.2 Special hazards arising from the substance or mixture

Gives off irritating fumes (or gases) and combustion product(Carbon oxides, incomplete combustion of hydrocarbons, etc) in a fire.

### 5.3 Advice for firefighters

Evacuate personnel to safe areas. Wear self-contained breathing apparatus and suitable protective equipment for firefighting.

### 5.4 Further information

Collect fire extinguishing water to avoid release to environment.

## Section 6 - Accidental Release Measures

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

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

Evacuate area. Ventilate area. Use personal protective equipment. Avoid contact with skin and eyes. Do not breathe vapors or aerosol. For personal protection see section 8.

### 6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided. Do not discharge product into the aquatic environment without pretreatment. Do not allow run-off from fire fighting to enter drains or water courses.

### 6.3 Methods and materials for containment and cleaning up:

Isolation leakage contaminated areas, restrict access. Small leak: use non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) to absorb spillage and put in a suitable container for disposal. Large Leak: embank and contain spillage. To prevent leakage into the water, sewers. Clear under the guidance of experts. For disposal see section 13.

## Section 7 - Handling and Storage

### 7.1 Precautions for safe handling:

Ensure adequate ventilation, especially in confined areas.

Use appropriate, approved safety equipment.

Avoid breathing concentrated vapor or mist.

Avoid contact with skin and eyes.

Keep container tightly closed when not in use.

Ensure that eyewash stations and safety showers are close to the workstation location.

Do not eat, drink or smoke at the workplace.

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Keep away from heat/sparks/open flames/hot surfaces.

For precautions see section 2.

### 7.2 Conditions for safe storage, including any incompatibilities:

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Avoid direct sunlight. Keep out of reach of children. Keep away from fire and heat. Store away from foodstuff and strong oxides.

## Section 8 - Exposure Controls, Personal Protection

**8.1 Exposure Limits:** Not established.

**8.2 Exposure controls**

**Engineering Control:** General industrial hygiene practice. Provide appropriate exhaust ventilation. Provide safe shower and eye wash fountain.

**Personal protective equipment:**

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eyes Protection:** Use face shield and safety glasses if in-eye risk exists. Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body Protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hands Protection:** Handle with chemical-resistant gloves.

**Other Protections:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday. Wash contaminated clothing before reuse.

## Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties	
Appearance	Liquid
Color	Cream white
Odor	Lemon odor
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not flammable.

Upper explosive limit % (V/V)	Not available.
Lower explosive limit % (V/V)	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Almost insoluble in water
Partition coefficient: n-octanol/water	Not available.
Ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## Section 10 - Stability and Reactivity

**10.1 Stability:** Stable under normal storage temperature and pressure.

**10.2 Conditions to Avoid:** Extremes of temperature, flames and mars.

**10.3 Incompatible materials:** Strong oxidizing agents. Amines (Avoid mixing with curing agent until being used) .

**10.4 Hazardous Decomposition Products:** Other decomposition products- no data available. In the event of fire:see section 5.

**10.5 Possibility of hazardous reactions:** None under normal processing.

## Section 11 - Toxicological Information

### Acute Toxicity:

Ingredient	CAS No.	LD50-Rat-Oral	LC50-Rat-inhalation	LD50-Rat-skin
Reaction products of Epichlorohydrin and Bisphenol A	25085-99-8	>2000mg/kg	-	-

**Skin Corrosion/Irritation:** Causes skin irritation.

**Serious Eye Damage/Eye Irritation:** Causes serious eye irritation.

**Respiratory or Skin Sensitization** May cause an allergic skin reaction.

**Germ Cell Mutagenicity** Based on available data, the classification criteria are not met.

**Carcinogenicity:** None of the components of this product is listed as a carcinogen by IARC, NTP, US OSHA.

**Reproductive Toxicity:** Based on available data, the classification criteria are not met.

<b>Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System):</b>	No known human health effects upon single exposure.
<b>Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System):</b>	No known human health effects upon repeated exposure.
<b>Aspiration Hazard:</b>	Based on available data, the classification criteria are not met.
<b>Potential Health Effects:</b>	
<b>Inhalation:</b>	Inhaling concentrated vapor may cause respiratory irritation.
<b>Skin Contact:</b>	Causes skin irritation. May cause an allergic skin reaction.
<b>Eye Contact:</b>	Causes serious eye irritation.
<b>Ingestion:</b>	May be harmful if ingested.

## Section 12 - Ecological Information

### 12.1 Toxicity

No data available

### 12.2 Persistence and degradability

No data available

### 12.3 Bioaccumulative potential

No data available

### 12.4 Mobility in soil

No data available

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

Toxic to aquatic life with long lasting effects. No relevant hazard after curing.

## Section 13 - Disposal Considerations

### Waste treatment methods

### Product

Recycle if possible. Offer surplus and non-recyclable products to a licensed disposal company. Observe according to the national and local related regulations.

### Contaminated packaging

Containers may still present chemical hazard when empty. Return to supplier for recycling if possible or disposal according local related regulations.

## Section 14 - Transport Information

### 14.1 UN-Number

ADR/RID/ADN, IMO/IMDG, IATA 3082.

### 14.2 UN proper shipping name

ADR/RID/ADN, IMO/IMDG, IATA ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

### 14.3 Transport hazard class(es)

ADR/RID/ADN, IMO/IMDG, IATA

Class 9

Label



### 14.4 Packing group

ADR/RID/ADN, IMO/IMDG, IATA III

### 14.5 Environmental hazards

Marine Pollutant (Yes / No): Yes



### 14.6 Special precautions for user

Refer to product manual, SDS, emergency procedures, etc. before handling.

14.7 Transport in bulk according to Annex 1 of Marpol and the IBC Code Not available.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.



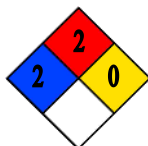
## 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## Section 16 - Additional Information

### HMIS Rating

Health hazard: 2  
Flammability: 2  
Physical Hazard: 0



### NFPA Rating

Health hazard: 2  
Fire Hazard: 2  
Reactivity Hazard: 0



### 16.1 Reference

- |     |  |   |
|-----|--|---|
| [1] | IPCS: The International Chemical Safety Cards (ICSC)           | website: <a href="http://www.ilo.org/dyn/icsc/showcard.home">http://www.ilo.org/dyn/icsc/showcard.home</a>  |
| [2] | EU REACH Registered Substance Database                         | website:<br><a href="http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances">http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances</a> |
| [3] | OECD: The Global Portal to Information on Chemical Substances, | website:<br><a href="http://www.echemportal.org/echemportal/index?pageID=0&amp;request_locale=en">http://www.echemportal.org/echemportal/index?pageID=0&amp;request_locale=en</a>       |
| [4] | CAMEO Chemicals,   | website: <a href="http://cameochemicals.noaa.gov/search/simple">http://cameochemicals.noaa.gov/search/simple</a>  |
| [5] | NLM: ChemIDplus,   | website:<br><a href="http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp">http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp</a>   |
| [6] | EPA: Integrated Risk Information System,                       | website: <a href="http://cfpub.epa.gov/iris/">http://cfpub.epa.gov/iris/</a>  |
| [7] | U.S. Department of Transportation: ERG,                        | website: <a href="http://www.phmsa.dot.gov/hazmat/library/erg">http://www.phmsa.dot.gov/hazmat/library/erg</a>  |
| [8] | Germany GESTIS-database on hazard substance                    | website: <a href="http://gestis-en.itrust.de/">http://gestis-en.itrust.de/</a>  |
| [9] | IARC   | website: <a href="http://www.iarc.fr/">http://www.iarc.fr/</a>  |

### 16.2 Abbreviations and acronyms

PC-STEL	Short term exposure limit
PC-TWA	Time Weighted Average
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
EC50	Effective Concentration 50%
PBT	Persistent, Bioaccumulative, Toxic

vPvB	very Persistent, very Bioaccumulative
ADR	Agreement on Dangerous Goods by Road
IATA	International Air Transport Association
IMO	International Maritime Organization
IMDG	The International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
UN	The United Nations
NTP	National Toxicology Program
ACGIH	The American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health

**16.3 Disclaimer**

-This safety data sheet was prepared in accordance with US OSHA Hazard Communication Standards (29 CFR 1910.1200).

-The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product

**16.4 Information on revision**

MSDS Creation Date: October 31, 2022

MSDS Revision Date: -

Reason For Revision: -

MSDS Edition: 1.0

\*\*\*\*\*End\*\*\*\*\*

# Safety Data Sheet (SDS)

In accordance with OSHA HCS 2012

## Section 1 - Chemical Product and Company Identification

### 1.1 Product Identification:

Product Name: MESG Metallic Epoxy Part B.  
Product Model: /

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

Identified uses: MESG Metallic Epoxy Part B.  
Use advised against: No data available.

### 1.3 Details of the Manufacture or supplier

Manufacture: MESG Products Pte. Ltd.  
Address: 3 Ang Mo Kio Street 62, Link@AMK, #01-28, Singapore (569139)  
Telephone: +65 6902 3188  
Fax: +65 6983 4388  
Email: support@mesgshop.com

### 1.4 Emergency telephone number

Emergency Telephone: +65 8788 7076

## Section 2 - Hazards Identification

### 2.1 Classification of the substance or mixture

**GHS Classification:** Skin corrosion, category 1C  
Eye damage, category 1  
Hazardous to the aquatic environment - Chronic hazard, category 3

### 2.2 GHS Label elements, including precautionary statements

**GHS Labels:**

**Pictogram(s):**



**Signal Word:** Danger

**Hazard Statement:** H314: Causes skin burn and serious eye damage.  
H412: Harmful to aquatic life with long lasting effects.

**Precautionary statement(s)**

**Prevention precautionary statements:**

P260: Do not breathe dust/fume/gas/mist/vapours/spray

P264: Wash thoroughly after handling.

P273: Avoid release to the environment

P280: Wear protective gloves/ eye protection/ face protection.

**Response Precautionary Statements:**

P310: Immediately call a POISON CENTER or doctor/physician

P363: Wash contaminated clothing before reuse

P301+330+331: IF SWALLOWED: Rinse mouth. Do NOT induce vomiting

P303+361+353: IF ON SKIN (or hair): Remove/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.

P304+P340: If inhaled: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

**Storage Precautionary Statements:** P405: Store locked up.

**Disposal Precautionary Statements:** P501: Dispose of contents and container in accordance with local/regional/national /international regulations.

**2.3 Description of any hazards not otherwise classified**

None. See section 11 for more detailed information on health effects and symptoms.

## Section 3 - Composition/Information on Ingredient

Substance (✓) Preparation ( ) Article ( )

Chemical name	CAS No.	Content (%)
Modified Cycloaliphatic amine	Proprietary.	100%

Abbreviation: CAS No. is Chemical Abstract Service Registry Number.

## Section 4 - First Aid Measures

**4.1 Description of first aid measures:**

**General** Consult a physician. Show this safety data sheet to the doctor in attendance.

**advice**

- Eye Contact:** Consult a doctor/medical service. Rinse immediately with plenty of water for 15 minutes. Remove contact lenses if present and easy to do - continue rinsing. Do not apply neutralizing agents.
- Skin Contact:** Consult a doctor/medical service. Wash immediately with lots of water and soap for 15 minutes. Remove clothing while washing.
- Inhalation:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Consult a doctor/medical service if breathing problems develop
- Ingestion:** Do NOT induce vomiting. If the person is conscious, wash out mouth with water. Immediately give lots of water to drink(at least 500ml) Never give anything by mouth to an unconscious person. Consult a physician attention and get medical immediately.

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

The most important known symptoms and effects are described in the labeling (see section 2) and/or in section 11.

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

Treat symptomatically and supportively.

**Section 5 -Extinguishing media****5.1 Extinguishing media**

**Suitable extinguishing media:** Use water spray, alcohol-resistant foam, dry powder or carbon dioxide.

**Unsuitable extinguishing media:** No known.

**5.2 Special hazards arising from the substance or mixture**

Corrosive liquid. High thermal decomposition products - Carbon oxides, nitrogen oxides, etc..

**5.3 Advice for firefighters**

Evacuate personnel to safe areas. As in any fire, Wear self-contained breathing apparatus and full protective gear for firefighting.

**5.4 Further information**

Collect fire extinguishing water to avoid release to environment.

**Section 6 - Accidental Release Measures**

For guidance on selection of personal protective equipment see Chapter 8 of this Material Safety Data Sheet. See Chapter 13 for information on disposal. Observe the relevant local and international regulations.

**6.1 Personal precautions, protective equipment and emergency procedures:**

Evacuate area. Ventilate area. Use personal protective equipment: Chemical protection suit including self-contained breathing apparatus. Avoid contact with skin and eyes. Do not breathe vapors or gas. For personal protection see section 8.

#### **6.2 Environmental precautions:**

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

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

Isolation leakage contaminated areas, restrict access. Do not touch the broken containers and spills before wearing suitable protective equipment. Cut off the source of leakage if safe. Small leak: use inertia, non-combustible material to absorb spill with a clean tools and put in suitable container. Large Leak: embank and contain spillage. To prevent leakage into the water, sewers, basements or confined spaces. Clear under the guidance of experts. For disposal see section 13. Flush contaminated areas with large amounts of water and direct rinsings to chemical sewer or collect for treatment.

## **Section 7 - Handling and Storage**

### **7.1 Precautions for safe handling:**

Use in well-ventilated area.

Avoid splashing of material. Safety showers should be readily available in handling and storage areas. Eye wash fountains should be located in the work areas and should be immediately accessible for emergency use.

Use appropriate, approved safety equipment, see section 8.

Avoid contact with skin and eyes. Avoid breathing vapor or mist.

Keep container tightly closed when not in use.

Do not eat, drink or smoke at the workplace.

Wash thoroughly after handling. Remove contaminated clothing and wash before reuse.

Containers may have hazardous residue after empty.

For precautions see section 2.

### **7.2 Conditions for safe storage, including any incompatibilities:**

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep away from incompatible materials and foodstuff. Storage areas should be equipped with suitable tools and containers to contain spillage.

## **Section 8 - Exposure Controls, Personal Protection**

**8.1 Exposure Limits:** Not established.

## 8.2 Exposure controls

**Engineering Control:** General industrial hygiene practice. Provide appropriate exhaust ventilation. Provide safe shower and eye wash fountain.

**Personal protective equipment:**

**Respiratory Protection:** Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Eyes Protection:** Tightly fitting safety goggles. Face shield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body Protection:** Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hands Protection:** Handle with chemical-resistant gloves. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product.

**Other Protections:** Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

## Section 9 - Physical and Chemical Properties

Information on basic physical and chemical properties	
Appearance	Liquid.
Color	Clear.
Odor	Weak odor.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability	Not flammable.
Upper explosive limit % (V/V)	Not available.
Lower explosive limit % (V/V)	Not available.

Vapor pressure	Not available.
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	Not available.
Partition coefficient: n-octanol/water	Not available.
Ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.

## Section 10 - Stability and Reactivity

10.1 **Stability:** Stable under recommended storage conditions.

10.2 **Conditions to Avoid:** Overheat.

10.3 **Incompatible materials:** Strong oxidizing agents.

10.4 **Hazardous Decomposition Products:** Other decomposition products- no data available. In the event of fire:see section 5.

10.5 **Possibility of hazardous reactions:** No known hazardous reaction under normal condition.

## Section 11 - Toxicological Information

<b>Acute Toxicity:</b>	No data available.
<b>Skin Corrosion/Irritation:</b>	Causes severe skin burns and eye damage
<b>Serious Eye Damage/Eye Irritation:</b>	Causes serious eye damage
<b>Respiratory or Skin Sensitization</b>	Based on available data, the classification criteria are not met.
<b>Germ Cell Mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity:</b>	None of the components of this product is listed as a carcinogen by IARC, NTP, US OSHA.
<b>Reproductive Toxicity:</b>	Based on available data, the classification criteria are not met.
<b>Specific Target Organ Toxicity - Single Exposure (Globally Harmonized System):</b>	Based on available data, the classification criteria are not met.
<b>Specific Target Organ Toxicity - Repeated Exposure (Globally Harmonized System):</b>	Based on available data, the classification criteria are not met.



<b>Aspiration Hazard:</b>	Based on available data, the classification criteria are not met.
<b>Potential Health Effects:</b>	
<b>Inhalation:</b>	Effects of inhalation are irritation that may lead to chemical pneumonitis and pulmonary edema. Causes severe irritation of upper respiratory tract with coughing, burns, breathing difficulty, and possible coma.
<b>Skin Contact:</b>	Causes skin burns. May cause deep, penetrating ulcers of the skin.
<b>Eye Contact:</b>	Causes severe eye burns. May cause irreversible eye injury.
<b>Ingestion:</b>	May cause circulatory system failure. May cause perforation of the digestive tract. Causes severe digestive tract burns with abdominal pain, vomiting, and possible death.

## Section 12 - Ecological Information

### 12.1 Toxicity

Harmful to aquatic life with long lasting effects. The preparation is corrosive, and direct contact with fauna will cause burns.

### 12.2 Persistence and degradability

No data available.

### 12.3 Bioaccumulative potential

No bioaccumulative potential

### 12.4 Mobility in soil

No data available.

### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6 Other adverse effects

Avoid products flowing into sewers and water ways.

## Section 13 - Disposal Considerations

### Waste treatment methods

#### Product

Recycle if possible. Offer surplus and non-recyclable products to a licensed disposal company. Observe according to the national and local related regulations.

#### Contaminated packaging

Containers may still present chemical hazard when empty. Return to supplier for recycling if possible.

## Section 14 - Transport Information

### 14.1 UN-Number

ADR/RID/ADN, IMO/IMDG, IATA 2735

### 14.2 UN proper shipping name

ADR/RID/ADN, IMO/IMDG, IATA AMINES, LIQUID, CORROSIVE,N.O.S.

### 14.3 Transport hazard class(es)

ADR/RID/ADN, IMO/IMDG, IATA

Class 8

Label



### 14.4 Packing group

ADR/RID/ADN, IMO/IMDG, IATA II

### 14.5 Environmental hazards

Marine pollutants (Yes/No): No.

### 14.6 Special precautions for user

Read safety instructions, SDS and emergency procedures before handling.

### 14.7 Transport in bulk according to Annex 1 of Marpol and the IBC Code

No data available.

## Section 15 - Regulatory Information

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

No data available.

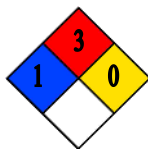
### 15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out.

## Section 16 - Additional Information

### HMIS Rating

Health hazard: 3  
 Flammability: 1  
 Physical Hazard: 0



### NFPA Rating

Health hazard: 3  
 Fire Hazard: 1  
 Reactivity Hazard: 0



### 16.1 Reference

- |     |  |  |
|-----|--|--|
| [1] | IPCS: The International Chemical Safety Cards (ICSC)           | website: <a href="http://www.ilo.org/dyn/icsc/showcard.home">http://www.ilo.org/dyn/icsc/showcard.home</a>   |
| [2] | EU REACH Registered Substance Database                         | website: <a href="http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances">http://echa.europa.eu/web/guest/information-on-chemicals/registered-substances</a> |
| [3] | OECD: The Global Portal to Information on Chemical Substances, | website: <a href="http://www.echemportal.org/echemportal/index?pageID=0&amp;request_locale=en">http://www.echemportal.org/echemportal/index?pageID=0&amp;request_locale=en</a>       |
| [4] | CAMEO Chemicals,   | website: <a href="http://cameochemicals.noaa.gov/search/simple">http://cameochemicals.noaa.gov/search/simple</a>   |
| [5] | NLM: ChemIDplus,   | website: <a href="http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp">http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp</a>   |
| [6] | EPA: Integrated Risk Information System,                       | website: <a href="http://cfpub.epa.gov/iris/">http://cfpub.epa.gov/iris/</a>   |
| [7] | U.S. Department of Transportation: ERG,                        | website: <a href="http://www.phmsa.dot.gov/hazmat/library/erg">http://www.phmsa.dot.gov/hazmat/library/erg</a>   |
| [8] | Germany GESTIS-database on hazard substance                    | website: <a href="http://gestis-en.itrust.de/">http://gestis-en.itrust.de/</a>   |
| [9] | IARC   | website: <a href="http://www.iarc.fr/">http://www.iarc.fr/</a>   |

### 16.2 Abbreviations and acronyms

PC-STEL	Short term exposure limit
PC-TWA	Time Weighted Average
IARC	International Agency for Research on Cancer
LC50	Lethal Concentration 50%
LD50	Lethal Dose 50%
EC50	Effective Concentration 50%
PBT	Persistent, Bioaccumulative, Toxic
vPvB	very Persistent, very Bioaccumulative
ADR	Agreement on Dangerous Goods by Road

IATA	International Air Transport Association
IMO	International Maritime Organization
IMDG	The International Maritime Dangerous Goods
ICAO	International Civil Aviation Organization
UN	The United Nations
NTP	National Toxicology Program
ACGIH	The American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety and Health Administration
NIOSH	National Institute for Occupational Safety and Health

### 16.3 Disclaimer

-This safety data sheet was prepared in accordance with US OSHA Hazard Communication Standards (29 CFR 1910.1200).

-The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product

### 16.4 Information on revision

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