



**CHO-BOND® 208 EPOXY HARDENER**

SDS No: PHC-050 EU

SDS Revision Date (dd/mm/yyyy): 02/11/2023

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## SAFETY DATA SHEET

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended.

### SECTION 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

**1.1 Product identifier : CHO-BOND® 208 EPOXY HARDENER**

**Product Code(s) :** 208

**SDS No. :** PHC-050 EU

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

: Hardener  
Use pattern: professional use  
No restrictions on use known.

**1.3 Details of the supplier of the safety data sheet:**

**Parker Hannifin Ltd.**

Engineered Materials Group  
Chomerics Division Europe  
Unit 6 Century Point  
Halifax Road  
High Wycombe  
Bucks, HP12 3SL  
United Kingdom  
E-mail: [chomerics\\_europe@parker.com](mailto:chomerics_europe@parker.com)  
Website: [www.chomerics.com](http://www.chomerics.com)  
Telephone: 044 (0) 1494 455 400

Parker Hannifin Manufacturing France SAS  
ZAC des Epineaux  
7 avenue Louis Blériot  
95740 Frépillon, France  
Telephone : 033 (01) 34 32 39 00  
Email: [parker.france@parker.com](mailto:parker.france@parker.com)  
Website: [www.parkerfrance.fr](http://www.parkerfrance.fr)

**Telephone :** 044 (0) 1494 455 400

**1.4 Emergency Telephone Number**

: In case of transportation emergencies: +1 (352) 353-3500 (INFOTRAC - United States of America)  
Poisons Information Centre  
Romania+40 21 318 3606  
Germany+49-30-18412-0  
France + 33 3 83 85 21 92  
The Netherlands +31 88 75 585 61  
Poland +48 42 2538 400  
Spain+34 917689800  
Italy  
06 68593726 (CAV "Osp. Pediatrico Bambino Gesù" Dip. Emergenza - Roma) 800 183459 (Az. Osp. Univ. Foggia - Foggia)  
081 5453333 (Az. Osp. "A. Cardarelli" - Napoli)  
06 49978000 (CAV Policlinico "Umberto I" - Roma)  
06 3054343 (CAV Policlinico "A. Gemelli" - Roma)  
055 7947819 (Az. Osp. "Careggi" U.O. Tossicologia Medica - Firenze)  
0382 24444 (CAV Centro Nazionale di Informazione Tossicologica - Pavia) 02 66101029 (Osp. Niguarda Ca' Granda - Milano)  
800 883300 (Azienda Ospedaliera Papa Giovanni XXII - Bergamo)

**1.5 National Contact**

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: E-mail: [chomerics\\_europe@parker.com](mailto:chomerics_europe@parker.com)  
Website: [www.chomerics.com](http://www.chomerics.com)

### SECTION 2. HAZARDS IDENTIFICATION

#### 2.1 Classification of the substance or mixture

Liquid - silver. Amine odour.

Most important hazards:

Causes skin irritation. Causes serious eye damage. May cause an allergic skin reaction. Occupational exposure to the substance or mixture may cause adverse effects. For further information, please refer to section 11 of the SDS. Toxic to aquatic life with long lasting effects. An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. See Section 12 for more environmental information.

This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:

Skin corrosion/irritation - Category 2; H315  
Eye damage/irritation - Category 1; H318  
Skin sensitization - Category 1; H317  
Chronic aquatic toxicity - Category 2; H411

#### 2.2 Label elements

Hazard pictogram(s)



Hazardous components which must be listed on the label: Polyamide resin.

Signal word:  
DANGER!

Hazard statements

H315 - Causes skin irritation.  
H318 - Causes serious eye damage.  
H317 - May cause an allergic skin reaction.  
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements:

P273 - Avoid release to the environment.  
P280 - Wear protective gloves and eye/face protection.  
P333 + P313 - If skin irritation or rash occurs: Get medical advice/attention.  
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 or doctor/physician.  
P501 - Dispose of contents/container in accordance with local regulation.

#### 2.3 Other hazards

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Other hazards which do not result in classification:

May burn if heated to extreme temperatures. Burning produces obnoxious and toxic fumes. May cause mild respiratory irritation at higher temperatures. May cause severe irritation and corrosive damage in the mouth, throat and stomach. Inhalation of fumes may result in metal fume fever, a flu-like illness. Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

Endocrine disrupting properties:None.

PBT assessment:

This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

#### 3.1 Substances

Not applicable

#### 3.2 Mixtures

Chemical nature - Mixture of: Inorganic substances in powdered form; Amines.

The following substances shall be indicated according to legislation:

Substance name	CAS No	EC No.	Reach Registration No.	% Weight	Classification according to Regulation (EC) nr. 1272/2008	SCL, M-factor, ATE
silver	7440-22-4	231-131-3	Not applicable.	65.0 - 80.0	not hazardous. Substances for which there are Community workplace exposure limits.	Not applicable
Polyamide resin	68410-23-1	Polymer	Not applicable.	20.0 - 35.0	Skin Irrit. 2; H315 Eye Dam. 1; H318 Skin Sens. 1; H317 Aquatic Chronic 2; H411 (self classified)	Not applicable

For the full text of the H phrases not mentioned in this Section or in Section 2, see Section 16.

### SECTION 4. FIRST-AID MEASURES

#### 4.1 Description of first aid measures

- Ingestion* : Do NOT induce vomiting. Never give anything by mouth to a person who is unconscious or is having convulsions. When symptoms persist or in all cases of doubt, seek medical advice.
- Inhalation* : Move to fresh air in case of accidental inhalation of vapours. If breathing is difficult, give oxygen by qualified medical personnel only. If breathing stops, provide artificial respiration. When symptoms persist or in all cases of doubt, seek medical advice.

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- Skin contact* : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse.
- Eye contact* : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

### 4.1.2 Self-protection for the first aider

- : None known or reported by the manufacturer.

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

- : Direct eye contact may produce severe irritation with possible eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision. May cause irreversible eye damage.  
Causes skin irritation. Contact may cause redness, swelling and a painful sensation. May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.  
May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include abdominal pain, vomiting, burns, perforations and bleeding. May cause mild respiratory irritation at higher temperatures. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.  
Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

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

- : Immediate medical attention is required. Causes serious eye damage.  
Provide general supportive measures and treat symptomatically.

## SECTION 5. FIRE-FIGHTING MEASURES

### 5.1 Extinguishing media

*Suitable extinguishing media*

- : Use media suitable to the surrounding fire such as water fog or fine spray, alcohol foams, carbon dioxide and dry chemical.

*Unsuitable extinguishing media*

- : None known.

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

- : Not considered flammable. However, may burn if exposed to extreme heat and flame. The pressure in sealed containers can increase under the influence of heat. Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; Metal oxides; Nitrogen oxides (NOx); Ammonia.

### 5.3 Advice for firefighters

*Protective equipment for fire-fighters*

- : Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. Firefighters should wear proper protective equipment and self-contained breathing apparatus with full face piece operated in positive pressure mode.

*Special fire-fighting procedures*

- : Move containers from fire area if safe to do so. Cool closed containers exposed to fire with water spray. Do not allow run-off from fire fighting to enter drains or water courses. Dike for water control.

## SECTION 6. ACCIDENTAL RELEASE MEASURES

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

- : Keep people away from and upwind of spill/leak. Restrict access to area until completion of clean-up. Wear appropriate protective equipment.

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### 6.2 Environmental precautions

- : Avoid release to the environment. Prevent product from entering drains, sewers, waterways and soil.

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

- : Ventilate the area. Remove all sources of ignition. Prevent further leakage or spillage if safe to do so. For spilled liquids: absorb spill with inert, non-combustible material such as sand, then place into suitable containers. Pick up and transfer to properly labeled containers. Contaminated absorbent material may pose the same hazards as the spilled product. Contact the proper local authorities.

### 6.4 Reference to other sections

- : Refer to protective measures listed in sections 7 and 8. Refer to Section 13 for disposal of contaminated material.

## SECTION 7. HANDLING AND STORAGE

### 7.1 Precautions for safe handling

- : Persons with recurrent skin eczema or sensitization problems should be excluded from working with this product. Once a person is sensitized, no further exposure to the material that caused the sensitization should be permitted.  
 Use with adequate ventilation. Wear suitable protective equipment during handling. Wear protective gloves and eye/face protection. Avoid breathing dust, fume or vapors. Avoid contact with skin, eyes and clothing. Keep away from extreme heat and direct flame. Keep away from incompatibles. Keep containers tightly closed when not in use. Wash thoroughly after handling. Contaminated work clothing must not be allowed out of the workplace. Empty containers retain residue (liquid and/or vapour) and can be dangerous.

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

- : Store in cool/well-ventilated place. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Inspect periodically for damage or leaks. Do not store near any incompatible materials (see Section 10).

### 7.3 Specific end use(s)

- : Hardener

## SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

### 8.1 Control Parameters

<u>Exposure Limits:</u>			
<u>Chemical Name</u>	<u>Exposure Limits</u>	<u>Type</u>	<u>Notes</u>
silver	0.1 mg/m <sup>3</sup> (TWA)	European Union (OEL)	None.
	0.01 mg/m <sup>3</sup> (dust) (TWA)	Denmark (OEL)	None.
	0.1 mg/m <sup>3</sup> (TWA)	Finland (OEL)	None.
	0.1 mg/m <sup>3</sup> (TWA)	France (OEL)	None.
	0.1 mg/m <sup>3</sup> (inhalable) (TWA)	Germany (OEL)	(exposure factor 8)
	0.1 mg/m <sup>3</sup> (TWA)	Hungary (OEL)	None.
	0.4 mg/m <sup>3</sup> (STEL)		
	0.1 mg/m <sup>3</sup> (TWA)	Italy (OEL)	None.
	0.05 mg/m <sup>3</sup> (TWA)	Poland (OEL)	None.

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	0.1 mg/m <sup>3</sup> (TWA)	Spain (OEL)	None.
	0.1 mg/m <sup>3</sup> (TWA)	The United Kingdom (WELs)	None.
<b>Polyamide resin</b>	None known.	European Union (OEL)	None.
	N/Av	France (OEL)	N/Av

**Biological Exposure Indices:**

No biological exposure limits noted for the ingredient(s).

**Derived No Effect Level (DNEL):**

(7440-22-4) general population inhalation systemic effects long term exposure 0.04 mg/m<sup>3</sup>; workers inhalation systemic effects long term exposure 0.1 mg/m<sup>3</sup> ; general population oral systemic effects long term exposure 1.2 mg/kg bw/day (68410-23-1) general population dermal systemic effects long term exposure 0.56 mg/kg bw/day; general population oral systemic effects long term exposure 0.56 mg/kg bw/day; general population inhalation systemic effects long term exposure 0.97 mg/m<sup>3</sup> ; workers dermal systemic effects long term exposure 1.1 mg/kg bw/day ; workers inhalation systemic effects long term exposure 3.9 mg/m<sup>3</sup>

**Predicted No Effect Concentration (PNEC):**

(7440-22-4) 0.04 µg/L (freshwater); 0.86 µg/L (marine water); 438.13 mg/kg (sediment (freshwater)); 438.13 mg/kg (sediment (marine water)); 0.025 mg/L (sewage treatment); 1.41 mg/kg (soil)

(68410-23-1) 0.00411 mg/L (freshwater); 0.000411 mg/L (marine water); 0.0411 mg/L (freshwater (intermittent releases)); 411.01 mg/kg (sediment (freshwater)); 41.1 mg/kg (sediment (marine water)); 3.14 mg/L (sewage treatment); 82.18 mg/kg (soil)

**8.2 Exposure controls**

**Ventilation and engineering measures**

: Use with adequate ventilation. Apply technical measures to comply with the occupational exposure limits. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. In case of insufficient ventilation wear suitable respiratory equipment.

**Respiratory protection**

: When workers are facing concentrations above the exposure limit they must use appropriate certified respirators. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used. Advice should be sought from respiratory protection specialists.

**Skin protection**

: Wear protective gloves. The suitability for a specific workplace should be discussed with the producers of the protective gloves. The selected protective gloves have to satisfy the specifications of EU Directive 89/689/EEC and the standard EN 374 derived from it. Depending on conditions of use, an impervious apron should be worn.

**Eye / face protection**

: Wear eye/face protection. Chemical splash goggles are recommended. A full face shield may also be necessary. See also EN 166.

**Other protective equipment**

: Ensure that eyewash stations and safety showers are close to the workstation location. Other equipment may be required depending on workplace standards.

**General hygiene considerations**

: Avoid breathing dust, fume or vapors. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Remove and wash contaminated clothing before re-use. Handle in accordance with good industrial hygiene and safety practice. Contaminated work clothing must not be allowed out of the workplace.

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### 8.3 Environmental exposure controls

: Dike for water control. Avoid release to the environment.

## SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1 Information on basic physical and chemical properties

<b>Physical state</b>	: Liquid - silver
<b>Colour</b>	: Silver
<b>Odour</b>	: Amine odour.
<b>Odour threshold</b>	: No information available.
<b>pH</b>	: No information available.
<b>Flash point</b>	: > 93.3°C (based on ingredients)
<b>Flashpoint (Method)</b>	: closed cup
<b>Lower flammable limit (% by vol.)</b>	: No information available.
<b>Upper flammable limit (% by vol.)</b>	: No information available.
<b>Auto-ignition temperature</b>	: No information available.
<b>Decomposition temperature</b>	: No information available.
<b>Oxidizing properties</b>	: None known.
<b>Explosive properties</b>	: Not explosive
<b>Initial boiling point and boiling range</b>	: > 400°C (based on ingredients)
<b>Melting/Freezing point</b>	: No information available.
<b>Relative density</b>	: > 1
<b>Solubility in water</b>	: slightly soluble
<b>Other solubility(ies)</b>	: No information available.
<b>Vapour pressure</b>	: No information available.
<b>Vapour density</b>	: No information available.
<b>Partition coefficient: n-octanol/water</b>	: No information available.
<b>Viscosity</b>	: No information available.
<b>Evaporation rate (BuAe = 1)</b>	: No information available.
<b>Particle characteristics</b>	: Not applicable.

### 9.2 Other Information

<b>Volatiles (% by weight)</b>	: No information available.
<b>Volatile organic Compounds (VOC's)</b>	: No information available.
<b>Other physical/chemical comments</b>	: No additional information.

## SECTION 10. STABILITY AND REACTIVITY

<b>10.1 Reactivity</b>	: Not normally reactive.
<b>10.2 Chemical stability</b>	: Stable under normal conditions.

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### 10.3 Possibility of hazardous reactions

: Hazardous polymerization does not occur.

**10.4 Conditions to avoid** : Direct sources of heat. Do not use in areas without adequate ventilation. Avoid contact with incompatible materials.

### 10.5 Incompatible materials

: Strong oxidizing agents; Strong acids; Epoxides

### 10.6 Hazardous decomposition products

: None known.

Burning produces obnoxious and toxic fumes. In the event of fire the following can be released: Carbon oxides; Metal oxides; Nitrogen oxides (NOx); Ammonia.

## SECTION 11. TOXICOLOGICAL INFORMATION

### 11.1 Information on Toxicological effects:

**Acute toxicity** : According to the classification criteria of the European Union, this product is not considered as being an acutely toxic chemical.

**Skin corrosion/Irritation** : This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:  
Skin corrosion/irritation - Category 2. Causes skin irritation.

#### Serious eye damage/irritation

: This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:  
Eye damage/irritation - Category 1. Causes serious eye damage.

#### Respiratory or skin sensitisation

: This mixture is classified as hazardous in accordance with Regulation (EC) No 1272/2008. Classification:  
Skin sensitization - Category 1. May cause an allergic skin reaction.  
May cause severe skin sensitization with allergic contact dermatitis symptoms such as swelling, rash and eczema.  
Not expected to be a respiratory sensitizer.

**Germ cell mutagenicity** : Contains no ingredient listed as a mutagen.

**Carcinogenicity** : Contains no ingredient listed as a carcinogen.

**Reproductive toxicity** : Contains no ingredient listed as toxic to reproduction.

**STOT-single exposure** : According to the classification criteria of the European Union, this product is not expected to cause target organ toxicity through a single exposure.

**STOT-repeated exposure** : According to the classification criteria of the European Union, this product is not expected to cause target organ toxicity through repeated exposures.

**Aspiration hazard** : According to the classification criteria of the European Union, this product is not considered as being an aspiration hazard to humans.

**Routes of exposure** : Eye contact; Skin contact; Inhalation; Ingestion



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**Effects of acute exposure :** Inhalation: May cause mild respiratory irritation at higher temperatures. May cause coughing and breathing difficulties. Inhalation of fumes may result in metal fume fever, a flu-like illness. Symptoms of metal fume fever may include fever, fatigue, vomiting, muscle aches and shortness of breath.

Skin contact: Causes skin irritation. Contact may cause redness, swelling and a painful sensation.

Eye contact: Causes serious eye damage. Symptoms may include severe pain, tearing, redness, swelling and blurred vision. May cause irreversible eye damage.

Ingestion: May cause severe irritation and corrosive damage in the mouth, throat and stomach. Symptoms may include severe abdominal pain, vomiting, burns and bleeding.

**Potential Chronic Health Effects**

: Silver in the form of a finely divided dust may cause discoloration in contact with skin, and argyrosis in case of inhalation.

**11.1.1 Acute Toxicity**

**Toxicological data :** There is no available data for the product itself, only for the ingredients. See below for individual ingredient acute toxicity data.

<u>Chemical name</u>	<u>LC<sub>50</sub>(4hr)</u> <u>inh, rat</u>	<u>LD<sub>50</sub></u>	
		<u>(Oral, rat)</u>	<u>(Rabbit, dermal)</u>
silver	> 5.16 mg/L (dust) (No mortality)	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)
Polyamide resin	No information available.	> 2000 mg/kg (No mortality)	> 2000 mg/kg (No mortality)

**11.2 Information on other Hazards**

: None known or reported by the manufacturer.

11.2.1 Endocrine disrupting properties : none

11.2.2 Other hazards : none

**SECTION 12. ECOLOGICAL INFORMATION**

**12.1 Toxicity**

: Toxic to aquatic life with long lasting effects. No data is available on the product itself. Should not be released into the environment. The product contains the following substances which are hazardous for the environment: Polyamide resin. This product also contains: Silver. The acute toxicity of silver to aquatic species varies drastically by the chemical form and correlates with the availability of free ionic silver. Aquatic toxicity is highly variable not only by organism but with physical and chemical characteristics of the water itself.

See the following tables for individual ingredient ecotoxicity data.

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**Ecotoxicity data:**

<u>Ingredients</u>	CAS No	Toxicity to Fish		
		LC50 / 96h	NOEC / 21 day	M Factor
silver	7440-22-4	No information available.	No information available.	None.
Polyamide resin	68410-23-1	7.07 mg/L (Zebra fish) (Read-across)	No information available.	None.

<u>Ingredients</u>	CAS No	Toxicity to Daphnia		
		EC50 / 48h	NOEC / 21 day	M Factor
silver	7440-22-4	No information available.	No information available.	None.
Polyamide resin	68410-23-1	5.18 mg/L (Daphnia magna) (Read-across)	No information available.	None.

<u>Ingredients</u>	CAS No	Toxicity to Algae		
		EC50 / 96h or 72h	NOEC / 96h or 72h	M Factor
silver	7440-22-4	No information available.	No information available.	None.
Polyamide resin	68410-23-1	4.15 mg/L/72hr (Green algae)	1.25 mg/L/72hr	None.

**12.2 Persistence and degradability**

- : The product itself has not been tested.  
 Contains the following chemicals which are not readily biodegradable: silver;  
 Polyamide resin.

**12.3 Bioaccumulation potential**

- : The product itself has not been tested. See the following data for ingredient information.

**Components**

**Partition coefficient n-octanol/water (log Kow)**

**Bioconcentration factor (BCF)**

Polyamide resin (CAS 68410-23-1)	< 0.3 to 3.66	No information available.
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**12.4 Mobility in soil** : The product itself has not been tested.

**12.5 Results of PBT and vPvB assessment**

- : This mixture contains no substance considered to be persistent, bioaccumulating nor toxic (PBT).

**12.6 Endocrine disrupting properties**

- : None known or reported by the manufacturer.

**12.7 Other Adverse Environmental effects**

- : No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

**12.8 Additional information** : None known or reported by the manufacturer.

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### SECTION 13. DISPOSAL CONSIDERATIONS






#### 13.1 Waste Treatment Methods:

**Handling for Disposal** : Handle in accordance with good industrial hygiene and safety practice. Refer to protective measures listed in sections 7 and 8. This material and its container must be disposed of in a safe way.

**Methods of Disposal** : Empty containers retain residue (liquid and/or vapour) and can be dangerous. Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken for local recycling or waste disposal.

Dispose of in accordance with the European Directives on waste and hazardous waste. Waste must be classified and labelled prior to recycling or disposal. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

### SECTION 14. TRANSPORTATION INFORMATION

<i>Regulatory Information</i>	<b>14.1 UN Number</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Transport hazard class(es)</b>	<b>14.4 Packing Group</b>	<i>Label</i>
ADR/RID	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyamide resin)	9	III	 
<b>EU ADR/RID Classification Code</b>	M6 - Pollutant to the aquatic environment, liquid				
<b>EU ADR / RID Hazard Identification Number</b>	90 - environmentally hazardous substance; miscellaneous dangerous substances				
<b>ADR/RID Additional information</b>	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. The environmentally hazardous substance mark must appear on packagings holding more than 5 litres of the material. Tunnel Code: 3(-)				
ICAO/IATA	UN3082	Environmentally hazardous substance, liquid, n.o.s. (Polyamide resin)	9	III	 
<b>ICAO/IATA Additional information</b>	Refer to the appropriate Packing Instruction, prior to shipping this material. Review all State and Operator Variations, prior to shipping this material.				
IMDG	UN3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Polyamide resin)	9	III	 
<b>IMDG Additional information</b>	May be shipped as Limited Quantity when transported in containers no larger than 5.0 Litres; in packages not exceeding 30 kg gross mass. The environmentally hazardous substance mark must appear on packagings holding more than 5 litres of the material. EmS No. F-A-S-F				

**14.5 Environmental hazards** : This product meets the criteria for an environmentally hazardous material according to the IMDG Code. See Section 12 for more environmental information.

**14.6 Special precautions for user**

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- : Appropriate advice on safety must accompany the package. Avoid release to the environment.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

- : Not applicable.

## SECTION 15. REGULATORY INFORMATION

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

- : Classification according to Regulation (EC) No. 1272/2008 on the classification of hazardous mixtures.

#### Authorisations

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:

None of the components are specifically listed.

#### Restrictions on use

Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use, as amended:

None of the components are specifically listed.

Directive 2012/18/EU (Seveso III) on the control of major-accident hazards involving dangerous substances:

None.

Directive 98/24/EC on the protection of the health and safety of workers from risks related to chemical agents at work:

Polyamide resin (CAS # 68410-23-1)

Directive 94/33/EC on the protection of young people at work:

Polyamide resin (CAS # 68410-23-1)

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006, as amended [including Regulation (EU) 2023/707].

Follow national regulation for work with chemical agents.

German legislation on water endangering substances AWSV - Water contaminating class (Germany): 2 (self classified)

### 15.2 Chemical safety assessment

- : A chemical safety assessment has not been carried out by the Manufacturer of this product.



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### SECTION 16. OTHER INFORMATION

<b>Legend</b>	: ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road CAS: Chemical Abstract Services CLP: Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures EC: European Community EC50: Effective Concentration 50% EEC: European Economic Community EN: European Standard ERG: Emergency Response Guidebook EU: European Union IATA: International Air Transport Association IMDG: International Maritime Dangerous Goods LC: Lethal Concentration LD: Lethal Dose NOEC: No observable effect concentration OEL: National occupational exposure limits PEL: Permissible exposure limit RID: Regulations concerning the International Carriage of Dangerous Goods by Rail SDS: Safety Data Sheet STEL: Short Term Exposure Limit TWA: Time Weighted Average
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**Information Source** : 1. Material Safety Data Sheet from manufacturer.  
2. Canadian Centre for Occupational Health and Safety, CCIInfoWeb Databases  
3. European Chemicals Agency, Classification Legislation  
4. OECD - The Global Portal to Information on Chemical Substances

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**Revision Information**

: (M)SDS sections updated 1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING; 2. HAZARDS IDENTIFICATION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION ;11. TOXICOLOGICAL INFORMATION :

**Regulation and Procedure** :

Skin irritation ;Expert judgement  
Skin sensitization ;Expert judgement  
Eye irritation ;Expert judgement  
Aquatic toxicity ;Expert judgement

H-phrases (full-text)

H315 - Causes skin irritation.  
H317 - May cause an allergic skin reaction.  
H318 - Causes serious eye damage.  
H411 - Toxic to aquatic life with long lasting effects.

**Other special considerations for handling**

: Provide adequate information, instruction and training for operators.



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