

Safety Data Sheet according to GB/T 16483-2008 and GB/T 17519-2013 - China

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1 Product identifier

Product name : HEMPADUR MASTIC 45889

Product identity : 4588912340

Product type : epoxy primer (base for multi-component product)

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

Field of application : metal industry, ships and shipyards.

Ready-for-use mixture : 45880 = 45889 3 vol. / 95880 1 vol. 45881 = 45889 3 vol. / 95881 1 vol. 4588W = 45889 3 vol. / 9588W 1 vol.

Identified uses : Industrial applications, Used by spraying.

#### 1.3 Details of the supplier of the safety data sheet

Company details : **HEMPEL (CHINA) LTD.**  
16th Floor, Millennium City 3,  
370 Kwun Tong Road, Kwun Tong,  
Kowloon, Hong Kong  
Tel: +852 2857 7663  
Fax: +852 2517 6311  
hempel@hempel.com

#### 1.4 Emergency telephone number

Shang Hai center of toxic chemicals information & consultation  
+86 400-6267-911

Manufacturer : **HEMPEL (KUNSHAN) COATINGS LTD.**  
No.1 Haihong Road, Zhangpu, Kunshan, Jiangsu, China  
Postal Code: 215321  
Tel: +86 512 57440886 Fax: +86 512 57440389

**HEMPEL (YANTAI) COATINGS LTD.**  
No.12 Zhujiang Road, Economic & Tech.  
Development Zone, Yantai, Shandong, China  
Postal Code: 264006  
Tel: 86 535 6936699 Fax: +86 535 6936688

**HEMPEL (GUANGZHOU) COATINGS LTD.**  
Canghai Si Road No.3, Yonghe District, Guangzhou  
Economic Technology Development  
District, Guangdong, China  
Postal Code: 511356  
Tel: +86 20 32812888 Fax: +86 20 32226478

Date of issue : 27 July 2017


Date of previous issue : 2 September 2013.

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Product definition : Mixture

##### GHS Classification

 **FLAMMABLE LIQUIDS** - Category 3

**SKIN CORROSION/IRRITATION** - Category 2

**SERIOUS EYE DAMAGE/ EYE IRRITATION** - Category 2A

**SKIN SENSITIZATION** - Category 1

**CARCINOGENICITY** - Category 2

**SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE)** - Category 2

**AQUATIC HAZARD (ACUTE)** - Category 3

**AQUATIC HAZARD (LONG-TERM)** - Category 3

See Section 11 for more detailed information on health effects and symptoms.

#### 2.2 Label elements

Hazard pictograms :



### SECTION 2: Hazards identification

Signal word :	Warning
Hazard statements :	<p>H226 - Flammable liquid and vapor.</p> <p>H319 - Causes serious eye irritation.</p> <p>H315 - Causes skin irritation.</p> <p>H317 - May cause an allergic skin reaction.</p> <p>H351 - Suspected of causing cancer.</p> <p>H373 - May cause damage to organs through prolonged or repeated exposure.</p> <p>H412 - Harmful to aquatic life with long lasting effects.</p>
Precautionary statements :	
Prevention :	<p>Obtain special instructions before use. Avoid breathing vapors, spray or mists. Wear protective gloves/protective clothing/eye protection/face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p>
Response :	<p>IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If skin irritation occurs: Get medical attention.</p>
Storage :	<p>Keep cool.</p>
Hazardous ingredients :	<p>Bisphenol A-(epichlorhydrin) epoxy resin MW ≤ 700</p> <p>xylene</p> <p>Methylstyrenated phenol</p> <p>middle molecular epoxy resin MMW 700-1200</p> <p>ethylbenzene</p>

#### 2.3 Other hazards

Other hazards which do not result in classification : None known.

### SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

Product/ingredient name	Identifiers	%	GHS Classification
Bisphenol A-(epichlorhydrin) epoxy resin MW ≤ 700	25068-38-6	≥10 - <25	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 2
xylene	1330-20-7	≥5 - ≤10	FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 AQUATIC HAZARD (ACUTE) - Category 2
Methylstyrenated phenol	68512-30-1	≥5 - ≤10	SKIN CORROSION/IRRITATION - Category 2 SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 3
middle molecular epoxy resin MMW 700-1200	25068-38-6	≥3 - ≤5	SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
benzyl alcohol	100-51-6	≥1 - ≤3	ACUTE TOXICITY (oral) - Category 4 ACUTE TOXICITY (inhalation) - Category 4
ethylbenzene	100-41-4	≥1 - ≤3	SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A FLAMMABLE LIQUIDS - Category 2 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 ASPIRATION HAZARD - Category 1 AQUATIC HAZARD (ACUTE) - Category 2
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	128554-52-9	<1	SKIN SENSITIZATION - Category 1 AQUATIC HAZARD (LONG-TERM) - Category 4

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.


### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General :	In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person.
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Seek immediate medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
Skin contact :	Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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

##### Potential acute health effects

Eye contact :	Causes serious eye irritation.
Inhalation :	No known significant effects or critical hazards.
Skin contact :	Causes skin irritation. May cause an allergic skin reaction.
Ingestion :	 No known significant effects or critical hazards.

##### Over-exposure signs/symptoms

Eye contact :	Adverse symptoms may include the following: pain or irritation watering redness
Inhalation :	No specific data.
Skin contact :	Adverse symptoms may include the following: irritation redness
Ingestion :	No specific data.

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


Notes to physician :	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments :	No specific treatment.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Extinguishing media :	Recommended: alcohol resistant foam, CO <sub>2</sub> , powders, water spray. Not to be used: waterjet.
-----------------------	---

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

Hazards from the substance or mixture :	 Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

#### 5.3 Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

## SECTION 6: Accidental release measures

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

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

### 6.2 Environmental precautions

Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

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

Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. Contaminated absorbent material may pose the same hazard as the spilled product.

### 6.4 Reference to other sections

See Section 1 for emergency contact information.

See Section 8 for information on appropriate personal protective equipment.

See Section 13 for additional waste treatment information.

## SECTION 7: Handling and storage

### 7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used. Contains epoxy constituents. Avoid all possible skin contact with epoxy and amine containing products, they may cause allergic reactions.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

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


Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

Product/ingredient name	Exposure limit values
 xylene	<b>GBZ 2.1 (China, 4/2007).</b> PC-TWA: 50 mg/m <sup>3</sup> 8 hours. PC-STEL: 100 mg/m <sup>3</sup> 15 minutes.
ethylbenzene	<b>GBZ 2.1 (China, 4/2007).</b> PC-STEL: 150 mg/m <sup>3</sup> 15 minutes. PC-TWA: 100 mg/m <sup>3</sup> 8 hours.

### Recommended monitoring procedures

If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### SECTION 8: Exposure controls/personal protection

#### 8.2 Exposure controls

##### Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

##### Individual protection measures

General :

Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.



Hygiene measures :

Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.

Eye/face protection :

Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Hand protection :

Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.

Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:

Recommended: Silver Shield / Barrier / 4H gloves, polyvinyl alcohol (PVA), Viton®

May be used: nitrile rubber, butyl rubber

Short term exposure: neoprene rubber, natural rubber (latex), polyvinyl chloride (PVC)

Body protection :

Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.

Wear suitable protective clothing. Always wear protective clothing when spraying.

Respiratory protection :

Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

##### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

### SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Physical state : Liquid.

Color : Grey

Odor : Solvent-like

pH : Testing not relevant or not possible due to nature of the product.

Melting point/freezing point : Testing not relevant or not possible due to nature of the product.

Boiling point/boiling range : Testing not relevant or not possible due to nature of the product.

Flash point : Closed cup: 37°C (98.6°F)

Evaporation rate : Testing not relevant or not possible due to nature of the product.

Flammability : Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.

Lower and upper explosive (flammable) limits : 0.8 - 13 vol %

Vapor pressure : Testing not relevant or not possible due to nature of the product.

### SECTION 9: Physical and chemical properties

Vapor density :	Testing not relevant or not possible due to nature of the product.
Relative density :	1.596 g/cm <sup>3</sup>
Solubility(ies) :	Partially soluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Lowest known value: >385°C (>725°F) (Methylstyrenated phenol).
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Testing not relevant or not possible due to nature of the product.
Explosive properties :	Slightly explosive in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.
Oxidizing properties :	Testing not relevant or not possible due to nature of the product.

#### 9.2 Other information

Solvent(s) % by weight :	Weighted average: 14 %
Water % by weight :	Weighted average: 0 %
VOC content :	185.2 g/l
VOC content - Hong Kong :	185.2 g/l
TOC Content :	Weighted average: 167 g/l
Solvent Gas :	Weighted average: 0.049 m <sup>3</sup> /l

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No specific test data related to reactivity available for this product or its ingredients.

#### 10.2 Chemical stability

The product is stable.

#### 10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

#### 10.4 Conditions to avoid

Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

#### 10.5 Incompatible materials

Highly reactive or incompatible with the following materials: oxidizing materials.  
Reactive or incompatible with the following materials: reducing materials.

#### 10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:

Decomposition products may include the following materials: carbon oxides halogenated compounds metal oxide/oxides

### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects


Exposure to component solvent vapor concentrations may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin. If splashed in the eyes, the liquid may cause irritation and reversible damage. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Epoxy and amine containing products can cause skin disorders such as allergic eczema. The allergy may arise after only a short exposure period.


#### Acute toxicity




### SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
<div>                      Bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700                       xylene                       Methylstyrenated phenol                       middle molecular epoxy resin MMW 700-1200                      benzyl alcohol                       ethylbenzene                       1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene                 </div>	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapor	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
	LD50 Oral	Rat	3523 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>4178 mg/m³	4 hours
	LD50 Oral	Rat	1620 mg/kg	-
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-


#### Acute toxicity estimates

Route	ATE value
<div>                      Oral                      Dermal                      Inhalation (gases)                      Inhalation (vapors)                 </div>	64877.3 mg/kg 12362 mg/kg 45172.9 ppm 247.2 mg/l


#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
<div>                      Bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700                       xylene                       Methylstyrenated phenol                      benzyl alcohol                       ethylbenzene                 </div>	Eyes - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Eyes - Mild irritant	Rabbit	-	-
	Eyes - Irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 15 milligrams
	Respiratory - Mild irritant	Rabbit	-	-
	Eyes - Mild irritant	Rabbit	-	-
		Rabbit	-	-


#### Sensitizer

Product/ingredient name	Route of exposure	Species	Result
<div>                      Bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700                      middle molecular epoxy resin MMW 700-1200                 </div>	skin	Guinea pig	Sensitizing
	skin	Guinea pig	Sensitizing

#### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
<div>                      Ethylbenzene                 </div>	Category 2	Not determined	hearing organs


#### Aspiration hazard

Product/ingredient name	Result
<div>                      Ethylbenzene                 </div>	ASPIRATION HAZARD - Category 1

#### Information on the likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

#### Potential chronic health effects

Sensitization :  Contains bisphenol A-(epichlorhydrin) epoxy resin MW =< 700, Methylstyrenated phenol, middle molecular epoxy resin MMW 700-1200, 1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene. May produce an allergic reaction.

Other information : No additional known significant effects or critical hazards.

### SECTION 12: Ecological information

#### 12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
<div> <div></div> bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700 </div>	Acute EC50 >11 mg/l Acute EC50 1.4 - 1.7 mg/l Acute LC50 3.1 mg/l	Algae Daphnia - Daphnia magna Fish - fathead minnow (Pimephales promelas)	72 hours 48 hours 96 hours
Methylstyrenated phenol	Acute EC50 15 mg/l Acute EC50 14 - 51 mg/l Acute EC50 25.8 mg/l	Algae Daphnia Fish	72 hours 48 hours 96 hours
middle molecular epoxy resin MMW 700-1200	Acute EC50 >100 mg/l	Daphnia	48 hours
benzyl alcohol	Acute LC50 >100 mg/l Acute EC50 230 mg/l Acute LC50 770 mg/l	Fish Daphnia Algae	96 hours 48 hours 72 hours
ethylbenzene	Acute LC50 460 mg/l	Fish	96 hours
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	Chronic NOEC <1000 µg/l Fresh water Acute LC50 >100 mg/l	Algae - Pseudokirchneriella subcapitata Algae	96 hours 72 hours
	Acute LC50 >100 mg/l	Fish	96 hours

#### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
<div> <div></div> bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700 </div>	OECD 302B Inherent Biodegradability: Zahn-Wellens/EMPA Test	12 % - Not readily - 28 days	-	-
xylene	-	>60 % - Readily - 28 days	-	-
benzyl alcohol	OECD 301C 301C Ready Biodegradability - Modified MITI Test (I)	92 - 96 % - Readily - 14 days	-	-
ethylbenzene	-	>70 % - Readily - 28 days	-	-
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	-	5 % - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<div> <div></div> bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700 </div>	-	-	Not readily
xylene	-	-	Readily
benzyl alcohol	-	-	Readily
ethylbenzene	-	-	Readily
1,3-bis(12-hydroxyocta-decanamide-N-methyle)benzene	-	-	Not readily

#### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
<div> <div></div> bisphenol A-(epichlorhydrin) epoxy resin MW =&lt; 700 </div>	2.64 - 3.78	31	low
xylene	3.12	8.1 - 25.9	low
Methylstyrenated phenol	3.627	-	low
middle molecular epoxy resin MMW 700-1200	2.64 - 3.78	31	low
benzyl alcohol	0.87	1.37	low
ethylbenzene	3.6	-	low

#### 12.4 Mobility in soil

Soil/water partition coefficient (K<sub>oc</sub>) : No known data available in our database.

Mobility : No known data available in our database.

#### 12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

#### 12.6 Other adverse effects



### SECTION 12: Ecological information

No known significant effects or critical hazards.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods





The generation of waste should be avoided or minimized wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

#### Packaging

The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

### SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
<b>UN Class</b>	UN1263	PAINT	3 	III	No.	-
<b>IMDG Class</b>	UN1263	PAINT	3 	III	No.	<u>Emergency schedules</u> F-E, S-E
<b>IATA Class</b>	UN1263	PAINT	3 	III	No.	

PG\* : Packing group

Env.\* : Environmental hazards

#### 14.6 Special precautions for user

**Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

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

Not applicable.

### SECTION 15: Regulatory information

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

Chinese legislation and regulation:

1. Regulations on the Safety Administration of Dangerous Chemicals (No.591)
2. GB30000.2-2013~GB30000.29-2013 Safety rules for classification, precautionary labelling and precautionary statement of chemicals
3. GB13690-2009 General rule for classification and hazard communication of chemicals
4. List of hazardous chemicals (2015)
5. GB15258-2009 General rules for preparation of precautionary label for chemicals
6. GB/T 16483-2008 Safety data sheet for chemical products- Content and order of sections
7. GB/T 17519-2013 Guidance on the compilation of safety data sheet for chemical products
8. GB12268-2012 List of dangerous goods
9. GB6944-2012 Classification and code of dangerous goods
10. GB/T 15098-2008 The principle of classification of transport packaging groups of dangerous goods
11. The hazardous chemical waste environmental pollution control measures (2005.10.1)
12. China hazardous waste list (2016)

International legislation and regulation:


1. UN Recommendations on the Transport of Dangerous Goods - Model Regulations

### SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate  
GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
DNEL = Derived No Effect Level  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number

#### GHS Classification

Classification	Justification
 FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 CARCINOGENICITY - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2 AQUATIC HAZARD (ACUTE) - Category 3 AQUATIC HAZARD (LONG-TERM) - Category 3	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method Calculation method

#### Notice to reader

 Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.