

### 1. Product and company identification

<b>Product name</b>	: SCHÖNOX EPA Resin
<b>Material uses</b>	: 2-component epoxy product - resin
<b>Supplier</b>	: HPS, Inc. 515 Wilhite Street Florence, AL 35630 USA
<b>Manufacturer</b>	: SCHÖNOX GmbH Alfred-Nobel-Straße 6 48720 Rosendahl Germany  Phone: +49 (0) 2547 - 910-0 Fax: +49 (0) 2547 - 910-101 E-mail: info@schoenox.com
<b>In case of emergency</b>	: +49-170-2255126
<b>National advisory body/Poison Centre</b>	: Antipoison Center AAPCC ( <a href="http://www.aapcc.org">http://www.aapcc.org</a> ) +1 800 222 1222
<b>Validation date</b>	: 6/6/2012.
<b>Print date</b>	: 6/6/2012.
<b>Product type</b>	: Liquid.

### 2. Hazards identification

#### Classification of the substance or mixture

**Product definition** : Mixture

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Xi; R36/38  
R43  
N; R51/53

**Human health hazards** : Irritating to eyes and skin. May cause sensitisation by skin contact.

**Environmental hazards** : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Label elements

**Hazard symbol or symbols** :



**Indication of danger** : Irritant, Dangerous for the environment

**Risk phrases** : R36/38- Irritating to eyes and skin.  
R43- May cause sensitisation by skin contact.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Safety phrases** : S2- Keep out of the reach of children.  
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28- After contact with skin, wash immediately with plenty of soap and water.  
S37/39- Wear suitable gloves and eye/face protection.  
S51- Use only in well-ventilated areas.  
S61- Avoid release to the environment. Refer to special instructions/safety data sheet.

**Hazardous ingredients** : reaction product: bisphenol-A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)  
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.

**Supplemental label elements** : Contains epoxy constituents. See information supplied by the manufacturer. This information is provided by the present Safety Data Sheet.

## 2. Hazards identification

**Other hazards which do not result in classification** : Not available.

### Emergency overview

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Colourless to light yellow.
<b>Odour</b>	: Characteristic. [Slight]
<b>Signal word</b>	: WARNING!
<b>Hazard statements</b>	: CAUSES EYE AND SKIN IRRITATION.
<b>Precautionary measures</b>	: Avoid contact with eyes, skin and clothing. Wash thoroughly after handling.
<b>OSHA/HCS status</b>	: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Potential acute health effects

<b>Inhalation</b>	: No known significant effects or critical hazards.
<b>Ingestion</b>	: No known significant effects or critical hazards.
<b>Skin</b>	: Severely irritating to the skin.
<b>Eyes</b>	: Irritating to eyes.

### Over-exposure signs/symptoms

<b>Inhalation</b>	: No specific data.
<b>Ingestion</b>	: No specific data.
<b>Skin</b>	: Adverse symptoms may include the following: irritation redness
<b>Eyes</b>	: Adverse symptoms may include the following: pain or irritation watering redness

See toxicological information (Section 11)

## 3. Composition/information on ingredients

Name	CAS number	%
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	25068-38-6 68609-97-2	50 - 100 10 - 25

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.

## 4. First-aid measures

<b>Eye contact</b>	: 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. Get medical attention immediately.
<b>Skin contact</b>	: In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
<b>Inhalation</b>	: Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
<b>Ingestion</b>	: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
<b>Protection of first-aiders</b>	: 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.
<b>Notes to physician</b>	: No specific treatment. Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

## 5. Fire-fighting measures

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
  - Not suitable** : None known.
- Special exposure hazards** : 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 water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
halogenated compounds
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt 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.
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
  - Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Avoid release to the environment. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers.

## 8. Exposure controls/personal protection

- 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.

## 8. Exposure controls/personal protection

- Engineering measures** : No special ventilation requirements. Good general ventilation should be sufficient to control worker exposure to airborne contaminants. If this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Respiratory** : 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. Recommended: Self-contained breathing apparatus.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 4-8 hours (breakthrough time): nitrile gloves  
Company recommendation from KCL GmbH, Germany:  
Gloves type: CAMATRIL 730; layer thickness: 0,40 mm; method: DIN EN 374
- Eyes** : 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 or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. Physical and chemical properties

- Physical state** : Liquid.
- Flash point** : [Product does not sustain combustion.]
- Colour** : Colourless to light yellow.
- Odour** : Characteristic. [Slight]
- Relative density** : 1.12
- Solubility** : Insoluble in the following materials: cold water and hot water.

## 10. Stability and reactivity

- Chemical stability** : The product is stable.
- Conditions to avoid** : No specific data.
- Incompatible materials** : No specific data.
- Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
oxirane, mono[(C12-14-alkyloxy)methyl] derivs.	LD50 Oral	Rat	17100 mg/kg	-

- Conclusion/Summary** : There are no data available on the preparation itself.

## 12. Ecological information

**Ecotoxicity** : Water polluting material. May be harmful to the environment if released in large quantities.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
reaction product: bisphenol-A-(epichlorhydrin); epoxy resin	Acute EC50 1.7 mg/l	Daphnia	48 hours
	Acute LC50 3.1 mg/l	Fish	96 hours

**Conclusion/Summary** : There are no data available on the preparation itself.

### Persistence/degradability

**Conclusion/Summary** : There are no data available on the preparation itself.

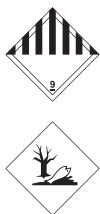
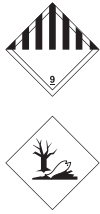
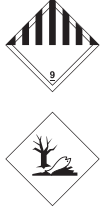
## 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.



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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
<b>DOT Classification</b>	3032	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)	9	III		-
<b>ADR/RID Class</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)	9	III		<b>Limited quantity</b> LQ7  <b>Tunnel code</b> E
<b>IMDG Class</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin). Marine pollutant	9	III		<b>Emergency schedules (EmS)</b> F-A / S-F  <b>Remarks</b> LQ 5 I

## 14. Transport information

<b>IATA-DGR Class</b>	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin); epoxy resin)	9	III	 	-
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PG\* : Packing group

## 15. Regulatory information

**HCS Classification** : Irritating material

**U.S. Federal regulations**

**TSCA**

: All ingredients appear on the Toxic Substance Control Act (TSCA) inventory or are not required to be listed.

**SARA Title III Section 313 (40 CFR Part 372):**

: This product is not subject to SARA notification requirements and 40 CFR Part 372, since it not contain any Toxic Chemical constituents above the minimus concentrations.

**State regulations**

**Massachusetts**

: None of the components are listed.

**New York**

: None of the components are listed.

**New Jersey**

: None of the components are listed.

**Pennsylvania**

: None of the components are listed.

**California Prop. 65**

: The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer. None of the components are listed.

## 16. Other information

**Label requirements** : CAUSES EYE AND SKIN IRRITATION.

**Hazardous Material Information System (U.S.A.)** :

<b>Health</b>	0
<b>Flammability</b>	0
<b>Physical hazards</b>	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

**National Fire Protection Association (U.S.A.)** :



Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**Date of printing** : 6/6/2012.

**Date of issue** : 6/6/2012.

**Date of previous issue** : No previous validation.

**Version** : 1

**Prepared by** : Not available.

 Indicates information that has changed from previously issued version.

## 16. Other information

### Notice to reader

FOR PROFESSIONAL USE ONLY

IMPORTANT NOTE: The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.



SCHÖNOX GmbH, Postbox 1140, D-48713 Rosendahl // <http://www.schoenox.de>



### 1. Product and company identification

<b>Product name</b>	: SCHÖNOX EPA Hardener
<b>Material uses</b>	: 2-component epoxy product - hardener
<b>Supplier</b>	: HPS, Inc. 515 Wilhite Street Florence, AL 35630 USA
<b>Manufacturer</b>	: SCHÖNOX GmbH Alfred-Nobel-Straße 6 48720 Rosendahl Germany  Phone: +49 (0) 2547 - 910-0 Fax: +49 (0) 2547 - 910-101 E-mail: info@schoenox.com
<b>In case of emergency</b>	: +49-170-2255126
<b>National advisory body/Poison Centre</b>	: Antipoison Center AAPCC ( <a href="http://www.aapcc.org">http://www.aapcc.org</a> ) +1 800 222 1222
<b>Validation date</b>	: 6/6/2012.
<b>Print date</b>	: 6/6/2012.
<b>Product type</b>	: Liquid.

### 2. Hazards identification

#### Classification of the substance or mixture

**Product definition** : Mixture

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

**Classification** : Xn; R20/22  
C; R35  
R43

**Human health hazards** : Harmful by inhalation and if swallowed. Causes severe burns. May cause sensitisation by skin contact.

#### Label elements

**Hazard symbol or symbols** :



**Indication of danger** : Corrosive

**Risk phrases** : R20/22- Harmful by inhalation and if swallowed.  
R35- Causes severe burns.  
R43- May cause sensitisation by skin contact.

**Safety phrases** : S2- Keep out of the reach of children.  
S26- In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.  
S28- After contact with skin, wash immediately with plenty of soap and water.  
S36/37/39- Wear suitable protective clothing, gloves and eye/face protection.  
S45- In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).  
S51- Use only in well-ventilated areas.

**Hazardous ingredients** : benzyl alcohol  
m-phenylenebis(methylamine)  
3-aminomethyl-3,5,5-trimethylcyclohexylamine

**Supplemental label elements** : Not applicable.

**Other hazards which do not result in classification** : Not available.



## 2. Hazards identification

### Emergency overview

- Physical state** : Liquid.
- Colour** : Colourless to light yellow.
- Odour** : Amine-like.
- Signal word** : DANGER!
- Hazard statements** : MAY BE FATAL IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC RESPIRATORY REACTION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.
- Precautionary measures** : Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Do not get in eyes. Do not get on skin. Do not eat, drink or smoke when using this product. Avoid contact with eyes, skin and clothing. Keep container tightly closed. Wash thoroughly after handling.
- OSHA/HCS status** : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

### Potential acute health effects

- Inhalation** : Toxic by inhalation. Corrosive to the respiratory system. May cause sensitisation by inhalation. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure.
- Ingestion** : Very toxic if swallowed. May cause burns to mouth, throat and stomach.
- Skin** : Corrosive to the skin. Causes burns. Toxic in contact with skin.
- Eyes** : Corrosive to eyes. Causes burns.

### Over-exposure signs/symptoms

- Inhalation** : Adverse symptoms may include the following:  
respiratory tract irritation  
coughing  
wheezing and breathing difficulties  
asthma
- Ingestion** : Adverse symptoms may include the following:  
stomach pains
- Skin** : Adverse symptoms may include the following:  
pain or irritation  
redness  
blistering may occur
- Eyes** : Adverse symptoms may include the following:  
pain  
watering  
redness

- Medical conditions aggravated by over-exposure** : Pre-existing respiratory disorders and disorders involving any other target organs mentioned in this MSDS as being at risk may be aggravated by over-exposure to this product.

See toxicological information (Section 11)

## 3. Composition/information on ingredients

Name	CAS number	%
benzyl alcohol	100-51-6	25 - 50
m-phenylenebis(methylamine)	1477-55-0	2,5 - 10
3-aminomethyl-3,5,5-trimethylcyclohexylamine	2855-13-2	2,5 - 10

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.

## 4. First-aid measures

- 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. Get medical attention immediately.
- Skin contact** : In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Get medical attention immediately.
- Inhalation** : Move exposed person to fresh air. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Loosen tight clothing such as a collar, tie, belt or waistband. Get medical attention immediately.
- Ingestion** : Call medical doctor or poison control centre immediately. Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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.
- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

## 5. Fire-fighting measures

- Flammability of the product** : In a fire or if heated, a pressure increase will occur and the container may burst.
- Extinguishing media**
- Suitable** : Use an extinguishing agent suitable for the surrounding fire.
- Not suitable** : None known.
- Special exposure hazards** : 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.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
carbon dioxide  
carbon monoxide  
nitrogen oxides
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

## 6. Accidental release measures

- Personal precautions** : No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment (see Section 8).
- Environmental precautions** : Avoid dispersal of spilt 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).
- Methods for cleaning up**
- Small spill** : Stop leak if without risk. Move containers from spill area. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.
- Large spill** : Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. 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). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see section 1 for emergency contact information and section 13 for waste disposal.

## 7. Handling and storage

- Handling** : Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Persons with a history of asthma, allergies or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Storage** : Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers.

## 8. Exposure controls/personal protection

Ingredient	Exposure limits
benzyl alcohol m-phenylenebis(methylamine)	<b>AIHA WEEL (United States, 5/2010).</b> TWA: 10 ppm 8 hour(s). <b>ACGIH TLV (United States, 2/2010). Absorbed through skin.</b> C: 0.1 mg/m <sup>3</sup> <b>NIOSH REL (United States, 6/2009). Absorbed through skin.</b> CEIL: 0.1 mg/m <sup>3</sup> <b>OSHA PEL 1989 (United States, 3/1989). Absorbed through skin.</b> CEIL: 0.1 mg/m <sup>3</sup>

- 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.
- Engineering measures** : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
- Personal protection**
- Respiratory** : 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. Recommended: Self-contained breathing apparatus.
- Hands** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. 4-8 hours (breakthrough time): nitrile gloves  
Company recommendation from KCL GmbH, Germany:  
Gloves type: CAMATRIL 730; layer thickness: 0,40 mm; method: DIN EN 374
- Eyes** : 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 or dusts.
- Skin** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

## 9. Physical and chemical properties

<b>Physical state</b>	: Liquid.
<b>Flash point</b>	: Open cup: >100°C (>212°F) [Product does not sustain combustion.]
<b>Colour</b>	: Colourless to light yellow.
<b>Odour</b>	: Amine-like.
<b>Relative density</b>	: 1.03
<b>Solubility</b>	: Very slightly soluble in the following materials: cold water and hot water.

## 10. Stability and reactivity

<b>Chemical stability</b>	: The product is stable.
<b>Conditions to avoid</b>	: No specific data.
<b>Incompatible materials</b>	: No specific data.
<b>Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
<b>Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.

## 11. Toxicological information

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	LC50 Inhalation Vapour	Rat	1000 ppm	8 hours
	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Rat	1230 mg/kg	-
m-phenylenebis(methylamine)	LC50 Inhalation Gas.	Rat	700 ppm	1 hours
	LD50 Dermal	Rabbit	2 g/kg	-
	LD50 Oral	Rat	930 mg/kg	-

**Conclusion/Summary** : There are no data available on the preparation itself.

## 12. Ecological information

**Ecotoxicity** : No known significant effects or critical hazards.

### Aquatic ecotoxicity

Product/ingredient name	Result	Species	Exposure
benzyl alcohol	Acute LC50 10000 ug/L Fresh water	Fish - Lepomis macrochirus - 33 to 75 mm	96 hours
3-aminomethyl-3,5,5-trimethylcyclohexylamine	Acute EC50 17.4 to 21.5 mg/L Fresh water	Daphnia - Daphnia magna - <24 hours	48 hours

**Conclusion/Summary** : There are no data available on the preparation itself.

### Persistence/degradability

**Conclusion/Summary** : There are no data available on the preparation itself.





## 13. Disposal considerations

**Waste disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. This material and its container must be disposed of in a safe way. Incineration or landfill should only be considered when recycling is not feasible. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

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

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

## 14. Transport information

Regulatory information	UN number	Proper shipping name	Classes	PG*	Label	Additional information
DOT Classification	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	8	-		-
ADR/RID Class	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	8	III		<b>Limited quantity</b> LQ7 <b>Tunnel code</b> E
IMDG Class	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	8	III		<b>Emergency schedules (EmS)</b> F-A, S-B <b>Remarks</b> LQ 5 I
IATA-DGR Class	2735	POLYAMINES, LIQUID, CORROSIVE, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine)	8	III		-

PG\* : Packing group

## 15. Regulatory information

- HCS Classification** : Highly toxic material  
Corrosive material  
Sensitising material  
Target organ effects
- U.S. Federal regulations**
- TSCA** : All ingredients appear on the Toxic Substance Control Act (TSCA) inventory or are not required to be listed.
- SARA Title III Section 313 (40 CFR Part 372):** : This product is not subject to SARA notification requirements and 40 CFR Part 372, since it not contain any Toxic Chemical constituents above the minimus concentrations.
- State regulations**
- Massachusetts** : The following components are listed: BENZYL ALCOHOL; M-XYLENE-ALPHA,ALPHA'-DIAMINE
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: m-XYLENE alpha, alpha'-DIAMINE; 1,3-BENZENEDIMETHANAMINE; ISOPHORONEDIAMINE; CYCLOHEXANEMETHANAMINE, 5-AMINO-1,3,3-TRIMETHYL-
- Pennsylvania** : The following components are listed: BENZENEMETHANOL; 1,3-BENZENED, IMETHANAMINE
- California Prop. 65** : The following statement is made in order to comply with the California Safe Drinking Water and Toxic Enforcement Act of 1986. This product is not known to the State of California to cause cancer. None of the components are listed.

## 16. Other information

**Label requirements** : MAY BE FATAL IF SWALLOWED. CAUSES RESPIRATORY TRACT, EYE AND SKIN BURNS. HARMFUL IF INHALED OR ABSORBED THROUGH SKIN. MAY CAUSE ALLERGIC RESPIRATORY REACTION. CONTAINS MATERIAL THAT MAY CAUSE TARGET ORGAN DAMAGE, BASED ON ANIMAL DATA.

**Hazardous Material Information System (U.S.A.)** :

Health

0

## 16. Other information

Flammability	0
Physical hazards	0

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on MSDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

National Fire Protection Association (U.S.A.) :



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Notice to reader

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IMPORTANT NOTE: The information in this data sheet is not intended to be exhaustive and is based on the present state of our knowledge and on current laws: any person using the product for any purpose other than that specifically recommended in the technical data sheet without first obtaining written confirmation from us as to the suitability of the product for the intended purpose does so at his own risk. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. Always read the Material Data Sheet and the Technical Data Sheet for this product if available. All advice we give or any statement made about the product by us (whether in this data sheet or otherwise) is correct to the best of our knowledge but we have no control over the quality or the condition of the substrate or the many factors affecting the use and application of the product. Therefore, unless we specifically agree in writing otherwise, we do not accept any liability whatsoever for the performance of the product or for any loss or damage arising out of the use of the product. All products supplied and technical advice given are subject to our standard terms and conditions of sale. You should request a copy of this document and review it carefully. The information contained in this data sheet is subject to modification from time to time in the light of experience and our policy of continuous development. It is the user's responsibility to verify that this data sheet is current prior to using the product. Brand names mentioned in this data sheet are trademarks of or are licensed to AkzoNobel.



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