



# SAFETY DATA SHEET

Chemi-Coat - Resin

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

### 1.1 Product identifier

**Product name** : Chemi-Coat - Resin  
**Product description** : Paint.  
**Product type** : Liquid.

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

Identified uses	
Industrial uses: Uses of substances as such or in preparations* at industrial sites Consumer uses: Private households (= general public = consumers) Professional uses: Public domain (administration, education, entertainment, services, craftsmen)	
Uses advised against	Reason
None identified.	-

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

Watco UK Limited  
Watco House  
Filmer Grove  
Godalming  
Surrey  
GU7 3AL  
Telephone no.: +44 (0) 1483 425000 (08:00 - 18:00 MON-FRI)  
Fax no.: +44 (0) 1483 428888

**e-mail address of person responsible for this SDS** : rpmeurohas@ro-m.com

### 1.4 Emergency telephone number

**Telephone number** : +44 (0) 207 858 1228  
**Hours of operation** : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Skin Irrit. 2, H315  
Eye Irrit. 2, H319  
Skin Sens. 1, H317  
Aquatic Chronic 2, H411

#### Classification according to Directive 1999/45/EC [DPD]

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.

## SECTION 2: Hazards identification

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

See Section 16 for the full text of the R phrases or H statements declared above.

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Warning

**Hazard statements** : Causes serious eye irritation.  
Causes skin irritation.  
May cause an allergic skin reaction.  
Toxic to aquatic life with long lasting effects.

### Precautionary statements

**General** : Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.

**Prevention** : Wear protective gloves and eye protection: nitrile rubber gloves and Safety glasses with side shields. Avoid release to the environment.

**Response** : IF ON SKIN: Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical attention. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Collect spillage.

**Storage** : Not applicable.

**Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Contains epoxy constituents. May produce an allergic reaction.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

### Special packaging requirements

**Containers to be fitted with child-resistant fastenings** : Not applicable.

**Tactile warning of danger** : Not applicable.

### 2.3 Other hazards

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

The mixture may be a skin sensitiser. It may also be a skin irritant and repeated contact may increase this effect. The mixture may be a skin sensitiser. It may also be a severe skin irritant.

### SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	5 - <25	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	CAS: 28064-14-4	5 - <25	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
oxirane, mono[ (C13-15-alkyloxy) methyl] derivatives	EC: 268-358-2 CAS: 68081-84-5	2,5 - <5	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
1,6-bis(2,3-epoxypropoxy) hexane	EC: 240-260-4 CAS: 16096-31-4	2,5 - <5	Xi; R36/38 R43 R52/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412	[1]
bisphenol-A-epoxy resin avg.mol.wght. ≤ 700	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	1 - <2,5	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
hydrocarbons, aromatic, C9	REACH #: 01-2119455851-35 EC: 918-668-5 Index: 649-356-00-4	1 - <2,5	R10 Xn; R65 Xi; R37 R66, R67 N; R51/53	Flam. Liq. 3, H226 STOT SE 3, H335 and H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1]
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	EC: 500-006-8 CAS: 28064-14-4	1 - <2,5	Xi; R36/38 R43 N; R51/53	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
			<b>See Section 16 for the full text of the R-phrases declared above.</b>	<b>See Section 16 for the full text of the H statements declared above.</b>	

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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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**

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Repeated or prolonged contact with the mixture 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.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Based on the properties of epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and a severe irritant. It contains epoxy based reactive diluents which are moderate to severely irritating to eyes, mucous membrane and skin and are strong sensitizers. Repeated skin contact may lead to irritation and to hyper-sensitivity, possibly with cross-sensitisation to other epoxies. Single oral exposure to doses of the epoxy based reactive diluents at or close to the lethal dose has been shown to cause transient neurotoxic effects in animals in some cases. However, uptake through skin and by inhalation has not caused such effects in animals. Prolonged exposure to high concentration may cause adverse effects in target organs such as liver and kidney.

Contains bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700, Oxirane, mono[(C10-16-alkyloxy)methyl] derivs., 1,6-bis(2,3-epoxypropoxy)hexane, bisphenol-A-epoxy resin avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700, Phenol, methylstyrenated, Pine Oil. May produce an allergic reaction.

**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.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.
- Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

### 6.2 Environmental precautions

- : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

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

- : 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). Preferably clean with a detergent. Avoid using solvents.

### 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

- : Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Put on appropriate personal protective equipment (see Section 8).  
Never use pressure to empty. Container is not a pressure vessel.  
Always keep in containers made from the same material as the original one.  
Comply with the health and safety at work laws.  
Do not allow to enter drains or watercourses.

## SECTION 7: Handling and storage

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

: Store in accordance with local regulations.

#### Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

#### Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking.

Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

**Recommendations** : Not available.

**Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

**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.

#### DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
bisphenol-A-epoxy resin avg.mol. wght. ≤ 700	DNEL	Short term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	12,3 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	8,3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	12,3 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	3,6 mg/kg bw/day	Man via the environment	Systemic
	DNEL	Short term Inhalation	0,75 mg/m <sup>3</sup>	Man via the environment	Systemic
	DNEL	Short term Oral	0,75 mg/kg bw/day	Man via the environment	Systemic
	DNEL	Long term Dermal	3,6 mg/kg bw/day	Man via the environment	Systemic
	DNEL	Long term Inhalation	0,75 mg/m <sup>3</sup>	Man via the environment	Systemic
	DNEL	Long term Oral	0,75 mg/kg bw/day	Man via the environment	Systemic

#### PNECs

**SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Compartment Detail	Value	Method Detail
bisphenol-A-epoxy resin avg.mol.wght. ≤ 700	Fresh water	3 µg/l	-
	Marine	0,3 µg/l	-
	Sewage Treatment Plant	10 mg/l	-
	Fresh water sediment	0,5 mg/kg dwt	-
	Marine water sediment	0,5 mg/kg dwt	-
	Sediment	0,05 mg/kg dwt	-

**8.2 Exposure controls**

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields. (EN166)

**Skin protection**

**Hand protection**

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): nitrile rubber gloves

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Wear overalls or long sleeved shirt. (EN 467)

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

Dry sanding, flame cutting and/or welding of the dry paint film will give rise to dust and/or hazardous fumes. Wet sanding/flattening should be used wherever possible. If exposure cannot be avoided by the provision of local exhaust ventilation, suitable respiratory protective equipment should be used.

## SECTION 8: Exposure controls/personal protection

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: organic vapour (Type A) and particulate filter (as filter combination A-P2) (EN 140)

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Various
<b>Odour</b>	: Mild.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Not available.
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.
<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 1,71
<b>Solubility(ies)</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

No additional information.

## 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** : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid** : When exposed to high temperatures may produce hazardous decomposition products.



## SECTION 10: Stability and reactivity

**10.5 Incompatible materials** : Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

**10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.  
If involved in a fire, toxic gases including CO, CO<sub>2</sub> and smoke can be generated.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Repeated or prolonged contact with the mixture 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.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Based on the properties of epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitizer and a severe irritant. It contains epoxy based reactive diluents which are moderate to severely irritating to eyes, mucous membrane and skin and are strong sensitizers. Repeated skin contact may lead to irritation and to hyper-sensitivity, possibly with cross-sensitisation to other epoxies. Single oral exposure to doses of the epoxy based reactive diluents at or close to the lethal dose has been shown to cause transient neurotoxic effects in animals in some cases. However, uptake through skin and by inhalation has not caused such effects in animals. Prolonged exposure to high concentration may cause adverse effects in target organs such as liver and kidney.

Contains bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700, Oxirane, mono[(C10-16-alkyloxy)methyl] derivs., 1,6-bis(2,3-epoxypropoxy)hexane, bisphenol-A-epoxy resin avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700, Phenol, methylstyrenated, Pine Oil. May produce an allergic reaction.

### Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Mouse	20000 mg/kg	-
	LD50 Oral	Rat	13600 mg/kg	-
oxirane, mono[(C13-15-alkyloxy)methyl] derivatives	LD50 Oral	Rat	>5000 mg/kg	-
		Rat	>5000 mg/kg	-
1,6-bis(2,3-epoxypropoxy)hexane	LD50 Oral	Rat	2900 mg/kg	-
bisphenol-A-epoxy resin avg.mol.wght. ≤ 700	LD50 Dermal	Rabbit	>2000 mg/kg	-
	LD50 Oral	Mouse	20 g/kg	-
	LD50 Oral	Rat	30 g/kg	-
hydrocarbons, aromatic, C9	LD50 Oral	Mouse	8400 mg/kg	-
	LD50 Oral	Rat	8400 mg/kg	-
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	LD50 Oral	Rat	>5000 mg/kg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Acute toxicity estimates

Chemi-Coat - Resin

## SECTION 11: Toxicological information

Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation	
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	Eyes - Mild irritant	Rabbit	-	100 milligrams	-	
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-	
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-	
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-	
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-	
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	Skin - Mild irritant	Rabbit	-	24 hours 500 microliters	-	
	bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	Skin - Oedema	Rabbit	1	4 hours	-
	Skin - Erythema/Eschar	Rabbit	1,5	4 hours	-	
	Skin - Mild irritant	Rabbit	-	4 hours	-	
	Eyes - Irritant	Rabbit	-	-	-	
	Eyes - Mild irritant	Rabbit	-	100 milligrams	-	
	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-	
	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams	-	
	Skin - Moderate irritant	Rabbit	-	24 hours 500 microliters	-	
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-	
	hydrocarbons, aromatic, C9	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters	-

### Conclusion/Summary

- Skin** : Causes skin irritation.
- Eyes** : Causes serious eye irritation.
- Respiratory** : Based on available data, the classification criteria are not met.

### Sensitisation

Product/ingredient name	Route of exposure	Species	Result
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	skin	Mouse	Sensitising
	skin	Guinea pig	Sensitising
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	skin	Guinea pig	Sensitising

### Conclusion/Summary

- Skin** : May cause an allergic skin reaction.
- Respiratory** : Based on available data, the classification criteria are not met.

### Mutagenicity

Product/ingredient name	Test	Experiment	Result
hydrocarbons, aromatic, C9	OECD 471	Subject: Bacteria	Negative

- Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	Negative - Oral - TDLo	Rat - Female	>1000 mg/kg	2 years; 7 days per week
	Negative - Oral - TDLo	Mouse - Male	>100 mg/kg	2 years; 3 days per week

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700 hydrocarbons, aromatic, C9	-	Negative	-	Rat	Oral: 750 mg/kg	7 days per week
	-	-	Negative	Mammal - species unspecified	Unreported	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity

Product/ingredient name	Result	Species	Dose	Exposure
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	Negative - Oral	Rat - Female	>540 mg/kg	7 days per week
	Negative - Dermal	Rabbit - Female	>300 mg/kg	7 days per week

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, aromatic, C9	Category 3	Not applicable.	Respiratory tract irritation and Narcotic effects

### Specific target organ toxicity (repeated exposure)

Not available.

### Aspiration hazard

Product/ingredient name	Result
hydrocarbons, aromatic, C9	ASPIRATION HAZARD - Category 1

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	Acute EC50 1,4 to 1,7 mg/l	Daphnia spec.	48 hours
	Acute IC50 >42,6 mg/l	Algae	18 hours
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	Acute LC50 3,1 mg/l	Fish	96 hours
	Acute EC50 3,5 mg/l	Daphnia spec.	48 hours
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	Acute LC50 5,7 mg/l	Fish	96 hours
	Acute EC50 2,1 mg/l	Daphnia spec.	48 hours
bisphenol-F-epoxy resin,	Acute LC50 1,3 mg/l	Fish	96 hours
	Chronic NOEC 0,3 mg/l	Daphnia spec.	21 days
	Acute EC50 3,5 mg/l	Daphnia spec.	48 hours

## SECTION 12: Ecological information

avg.mol.wght. ≤ 700	Acute LC50 5,7 mg/l	Fish	96 hours
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**Conclusion/Summary** : Toxic to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	OECD 302B	12 % - Not readily - 28 days	-	-
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	OECD 301B	10 to 16 % - Not readily - 28 days	-	-
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	OECD 301B	6 to 12 % - Not readily - 28 days	-	-
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	OECD 301F	5 % - Not readily - 28 days	-	-
	OECD 301B	10 to 16 % - Not readily - 28 days	-	-
	OECD 301B	10 to 16 % - Not readily - 28 days	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met. This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	-	-	Not readily
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	-	-	Not readily
1,6-bis(2,3-epoxypropoxy) hexane	-	-	Not readily
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	-	-	Not readily
hydrocarbons, aromatic, C9	-	-	Readily
bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700	-	-	Not readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700	3 to 5	100 to 3000	high
oxirane, mono[(C13-15-alkyloxy)methyl] derivatives	>3	-	low
bisphenol-A-epoxy resin avg. mol.wght. ≤ 700	3,24	3 to 31	low
hydrocarbons, aromatic, C9	3.7 to 4.5	-	high

### 12.4 Mobility in soil

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances




#### Packaging

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Not emptied containers are hazardous waste.

**Special precautions** : 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN 3082	UN 3082	UN 3082
<b>14.2 UN proper shipping name</b>	Environmentally hazardous substance, liquid, n.o.s. [bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700]	Environmentally hazardous substance, liquid, n.o.s. Marine pollutant [bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700]	Environmentally hazardous substance, liquid, n.o.s. [bisphenol-A-epoxy resin, avg.mol.wght. ≤ 700, bisphenol-F-epoxy resin, avg.mol.wght. ≤ 700]
<b>14.3 Transport hazard class(es)</b>	9 	9 	9 
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	Yes.	Yes.	Yes.

Chemi-Coat - Resin

## SECTION 14: Transport information

<b>Additional information</b>	<b>Limited quantity:</b> LQ7  <b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4  ADR Tunnel code: (E)	<b>Emergency schedules (EmS):</b> F-A + S-F  <b>Marine pollutant (P)</b>  <b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4.6	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 450 L Packaging instructions: 964 <b>Cargo Aircraft Only</b> Quantity limitation: 450 L Packaging instructions: 964 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 30 Kg Packaging instructions: Y 964
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**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.

## SECTION 15: Regulatory information

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

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**CN code** : 3209 90 00

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

##### Other EU regulations

**VOC for Ready-for-Use Mixture** : IIA/j. Two-pack reactive performance coatings for specific end use such as floors. EU limit value for this product : 550g/l (2007) 500g/l (2010.) This product contains a maximum of 35 g/l VOC.

**Europe inventory** : Not determined.

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** :

- ATE = Acute Toxicity Estimate
- CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
- DMEL = Derived Minimal Effect Level
- DNEL = Derived No Effect Level
- EUH statement = CLP-specific Hazard statement
- PBT = Persistent, Bioaccumulative and Toxic
- PNEC = Predicted No Effect Concentration
- RRN = REACH Registration Number

## SECTION 16: Other information

vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	Expert judgment Expert judgment Expert judgment Expert judgment

**Full text of abbreviated H statements** : H226 Flammable liquid and vapour.  
H304 May be fatal if swallowed and enters airways.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation. May cause drowsiness or dizziness.  
and  
H336  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]** : Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2  
Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3  
Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1  
Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2  
Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3  
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1  
STOT SE 3, H335 and H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation and Narcotic effects] - Category 3

**Full text of abbreviated R phrases** : R10- Flammable.  
R65- Harmful: may cause lung damage if swallowed.  
R37- Irritating to respiratory system.  
R36/38- Irritating to eyes and skin.  
R43- May cause sensitisation by skin contact.  
R66- Repeated exposure may cause skin dryness or cracking.  
R67- Vapours may cause drowsiness and dizziness.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications [DSD/DPD]** : Xn - Harmful  
Xi - Irritant  
N - Dangerous for the environment

**Date of printing** : 27/05/2015.

**Date of issue/ Date of revision** : 6/01/2015.

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

**Version** : 1

### Notice to reader

***The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.***



# SAFETY DATA SHEET

Chemi-Coat - Curing Agent

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

### 1.1 Product identifier

**Product name** : Chemi-Coat - Curing Agent  
**Product description** : Hardener.  
**Product type** : Liquid.

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

Identified uses	
Industrial uses: Uses of substances as such or in preparations* at industrial sites Consumer uses: Private households (= general public = consumers) Professional uses: Public domain (administration, education, entertainment, services, craftsmen)	
Uses advised against	Reason
None identified.	-

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

Watco UK Limited  
Watco House  
Filmer Grove  
Godalming  
Surrey  
GU7 3AL  
Telephone no.: +44 (0) 1483 425000 (08:00 - 18:00 MON-FRI)  
Fax no.: +44 (0) 1483 428888

**e-mail address of person responsible for this SDS** : rpmeurohas@ro-m.com

### 1.4 Emergency telephone number

**Telephone number** : +44 (0) 207 858 1228  
**Hours of operation** : 24 / 7

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

**Product definition** : Mixture

#### Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Acute Tox. 4, H302  
Acute Tox. 4, H332  
Skin Corr. 1B, H314  
Eye Dam. 1, H318  
Skin Sens. 1B, H317  
Aquatic Chronic 3, H412

#### Classification according to Directive 1999/45/EC [DPD]

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



## SECTION 2: Hazards identification

- Classification** : Xn; R20/22  
C; R34  
R43  
R52/53
- Human health hazards** : Harmful by inhalation and if swallowed. Causes burns. May cause sensitisation by skin contact.
- Environmental hazards** : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R phrases or H statements declared above.

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

### 2.2 Label elements

**Hazard pictograms** :



**Signal word** : Danger

**Hazard statements** : Harmful if swallowed or if inhaled.  
Causes severe skin burns and eye damage.  
May cause an allergic skin reaction.  
Harmful to aquatic life with long lasting effects.

#### Precautionary statements

- General** : Keep out of reach of children. Read label before use. If medical advice is needed, have product container or label at hand.
- Prevention** : Use only outdoors or in a well-ventilated area. Wear protective gloves and face protection: neoprene or nitrile rubber gloves and Goggles, face shield or other full-face protection where potential exists for direct exposure to aerosols or splashes.
- Response** : IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Immediately call a doctor. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Immediately call a doctor. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
- Storage** : Store locked up.
- Disposal** : Dispose of contents and container in accordance with all local, regional, national and international regulations.

**Supplemental label elements** : Not applicable.

**Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles** : Not applicable.

#### Special packaging requirements

- Containers to be fitted with child-resistant fastenings** : Yes, applicable.
- Tactile warning of danger** : Yes, applicable.

### 2.3 Other hazards

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

### SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

Product/ingredient name	Identifiers	%	Classification		Type
			67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	35 - <50	Xn; R20/22	Acute Tox. 4, H302 Acute Tox. 4, H332	[1]
polymethylenecyclohexanamine	CAS: 135108-88-2	20 - <25	Xn; R22 C; R34	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Irrit. 2, H315	[1]
cyclo-aliphatic polyamine adduct n.o.s.	CAS: -	10 - <20	Xi; R38	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	[1]
m-fenilenbis (methylamine)	REACH #: 01-2119480150-50 EC: 216-032-5 CAS: 1477-55-0 Index: 216-032-5	7 - <10	T; R23 Xn; R22 C; R34 R43 R52/53	Acute Tox. 4, H302 Acute Tox. 3, H331 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	[1]
4,4'-methylenebis (cyclohexylamine)	REACH #: 01-2119541673-38 EC: 217-168-8 CAS: 1761-71-3	1 - <2,5	Xn; R22, R48/22 C; R35 R43 N; R51/53	Acute Tox. 4, H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373 Aquatic Chronic 2, H411	[1]
			<b>See Section 16 for the full text of the R-phrases declared above.</b>	<b>See Section 16 for the full text of the H statements declared above.</b>	

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, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

#### Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Seek immediate medical attention.

## SECTION 4: First aid measures

- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognised skin cleanser. Do NOT use solvents or thinners. Get medical attention immediately.
- Ingestion** : If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
- 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.

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

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains m-Xylylenediamine, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

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

- 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.
- Specific treatments** : No specific treatment.

See toxicological information (Section 11)

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

- Suitable extinguishing media** : Recommended: alcohol-resistant foam, CO<sub>2</sub>, powders, water spray.
- Unsuitable extinguishing media** : Do not use water jet.

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

- Hazards from the substance or mixture** : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.
- Hazardous thermal decomposition products** : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

### 5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.
- Special protective equipment for fire-fighters** : Appropriate breathing apparatus may be required.
- Additional information** : No unusual hazard if involved in a fire.

## SECTION 6: Accidental release measures

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

- For non-emergency personnel** : Exclude sources of ignition and ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8.
- For emergency responders** : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

- 6.2 Environmental precautions** : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

- 6.3 Methods and materials for containment and cleaning up** : 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). Preferably clean with a detergent. Avoid using solvents.

- 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** : Keep away from heat, sparks and flame. No sparking tools should be used. Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.  
Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.  
Put on appropriate personal protective equipment (see Section 8).  
Never use pressure to empty. Container is not a pressure vessel.  
Always keep in containers made from the same material as the original one.  
Comply with the health and safety at work laws.  
Do not allow to enter drains or watercourses.

- 7.2 Conditions for safe storage, including any incompatibilities** : Store in accordance with local regulations.  
**Notes on joint storage**  
Keep away from: oxidising agents, strong alkalis, strong acids.  
**Additional information on storage conditions**  
Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking.  
Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

### 7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

**SECTION 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. 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.

**DNELs/DMELs**

Product/ingredient name	Type	Exposure	Value	Population	Effects
benzyl alcohol	DNEL	Short term Dermal	47 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	450 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	9,5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	90 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Dermal	28,5 mg/kg bw/day	Consumers	Systemic
	DNEL	Short term Inhalation	40,55 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Short term Oral	25 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Dermal	5,7 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	8,11 mg/m <sup>3</sup>	Consumers	Systemic
	DNEL	Long term Oral	5 mg/kg bw/day	Consumers	Systemic

**PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
benzyl alcohol	Fresh water	1 mg/l	Assessment Factors
	Marine	0,1 mg/l	Assessment Factors
	Fresh water sediment	5,27 mg/kg	Assessment Factors
	Marine water sediment	0,527 mg/kg	Assessment Factors
	Soil	0,456 mg/kg	Assessment Factors
	Sewage Treatment Plant	39 mg/l	Assessment Factors

**8.2 Exposure controls**

**Appropriate engineering controls** : Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapours below the OEL, suitable respiratory protection must be worn.

**Individual protection measures**

**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. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** : Safety glasses with side shields. (EN166)

## SECTION 8: Exposure controls/personal protection

### Skin protection

#### Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.

**Gloves** : For prolonged or repeated handling, use the following type of gloves:

Recommended: > 8 hours (breakthrough time): neoprene or nitrile rubber gloves

The recommendation for the type or types of glove to use when handling this product is based on information from the following source:

EN 374-3 : 2003

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of use, as included in the user's risk assessment.

**Body protection** : Wear apron or overall if there is a risk of exposure to splashes. (EN 467)

**Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

**Respiratory protection** : If workers are exposed to concentrations above the exposure limit, they must use appropriate, certified respirators.

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: organic vapour (Type A) and particulate filter (as filter combination A-P2) (EN 140)

**Environmental exposure controls** : Do not allow to enter drains or watercourses.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

#### Appearance

<b>Physical state</b>	: Liquid.
<b>Colour</b>	: Not available.
<b>Odour</b>	: Not available.
<b>pH</b>	: Not available.
<b>Melting point/freezing point</b>	: Not available.
<b>Initial boiling point and boiling range</b>	: Not available.
<b>Flash point</b>	: Closed cup: >99°C
<b>Evaporation rate</b>	: Not available.
<b>Flammability (solid, gas)</b>	: Not available.
<b>Burning time</b>	: Not applicable.
<b>Burning rate</b>	: Not applicable.
<b>Upper/lower flammability or explosive limits</b>	: Not available.
<b>Vapour pressure</b>	: Not available.

## SECTION 9: Physical and chemical properties

<b>Vapour density</b>	: Not available.
<b>Relative density</b>	: 1,08
<b>Solubility(ies)</b>	: Not available.
<b>Solubility in water</b>	: Not available.
<b>Partition coefficient: n-octanol/ water</b>	: Not available.
<b>Auto-ignition temperature</b>	: Not available.
<b>Decomposition temperature</b>	: Not available.
<b>Viscosity</b>	: Not available.
<b>Explosive properties</b>	: Not available.
<b>Oxidising properties</b>	: Not available.

### 9.2 Other information

No additional information.

## SECTION 10: Stability and reactivity

<b>10.1 Reactivity</b>	: No specific test data related to reactivity available for this product or its ingredients.
<b>10.2 Chemical stability</b>	: Stable under recommended storage and handling conditions (see Section 7).
<b>10.3 Possibility of hazardous reactions</b>	: Under normal conditions of storage and use, hazardous reactions will not occur.
<b>10.4 Conditions to avoid</b>	: When exposed to high temperatures may produce hazardous decomposition products.
<b>10.5 Incompatible materials</b>	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.
<b>10.6 Hazardous decomposition products</b>	: Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, toxic gases including CO, CO <sub>2</sub> and smoke can be generated.

## SECTION 11: Toxicological information

### 11.1 Information on toxicological effects

There are no data available on the mixture itself. See Sections 2 and 3 for details.

Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Contains m-Xylylenediamine, 4,4'-methylenebis(cyclohexylamine). May produce an allergic reaction.

#### Acute toxicity

## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure	
benzyl alcohol	LC50 Inhalation Vapour	Rat	>4178 mg/l	4 hours	
	LD50 Dermal	Rabbit	2000 mg/kg	-	
	LD50 Oral	Rat	1230 mg/kg	-	
polymethylenecyclohexanamine	LD50 Dermal	Rabbit	>1000 mg/kg	-	
	m-fenilenbis(methylamine)	LC50 Inhalation Dusts and mists	Rat	1900 mg/m <sup>3</sup>	1 hours
		LC50 Inhalation Gas.	Rat	700 ppm	1 hours
4,4'-methylenebis (cyclohexylamine)	LD50 Dermal	Rabbit	2 g/kg	-	
	LD50 Oral	Rat	930 mg/kg	-	
	LD50 Dermal	Rabbit	2110 mg/kg	-	

**Conclusion/Summary** : Harmful if swallowed. Harmful if inhaled.

### Acute toxicity estimates

Not available.

### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzyl alcohol	Skin - Mild irritant	Man	-	48 hours 16 milligrams	-
	Skin - Moderate irritant	Pig	-	100 Percent	-
	Skin - Moderate irritant	Rabbit	-	24 hours 100 milligrams	-
m-fenilenbis(methylamine)	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Skin - Severe irritant	Rabbit	-	24 hours 750 Micrograms	-
4,4'-methylenebis (cyclohexylamine)	Eyes - Severe irritant	Rabbit	-	24 hours 10 microliters	-

### Conclusion/Summary

**Skin** : Causes severe skin burns and eye damage.

**Eyes** : Causes serious eye damage.

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

### Sensitisation

#### Conclusion/Summary

**Skin** : May cause an allergic skin reaction.

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

### Mutagenicity

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Carcinogenicity

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Oral - TD	Rat	-	103 weeks; 5 days per week

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
polymethylenecyclohexanamine	-	-	-	Rat	Oral: 15 mg/kg	28 days

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Teratogenicity



## SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
benzyl alcohol	Negative - Unreported	Mouse - Female	550 mg/kg	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met.

### Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
4,4'-methylenebis(cyclohexylamine)	Category 2	Not determined	liver

### Aspiration hazard

Not available.

**Other information** : Not available.

## SECTION 12: Ecological information

### 12.1 Toxicity

There are no data available on the mixture itself.  
Do not allow to enter drains or watercourses.

Product/ingredient name	Result	Species	Exposure
benzyl alcohol	Acute EC50 770 mg/l	Algae	72 hours
	Acute EC50 230 mg/l	Daphnia spec. - Daphnia magna	48 hours
	Acute LC50 646 mg/l	Fish - Leuciscus idus	48 hours
	Acute LC50 460000 µg/l Fresh water	Fish - Pimephales promelas - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
m-fenilenbis(methylamine)	Chronic NOEC 51 mg/l	Daphnia spec. - Daphnia magna	21 days
	Acute EC50 10 to 100 mg/l	Daphnia spec.	48 hours
4,4'-methylenebis(cyclohexylamine)	Acute LC50 >100 mg/l	Fish	96 hours
	Acute EC50 140 to 200 mg/l	Algae	72 hours
	Acute EC50 6,84 mg/l	Daphnia spec.	48 hours
	Acute LC50 46 to 100 mg/l	Fish	96 hours

**Conclusion/Summary** : Harmful to aquatic life with long lasting effects.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
benzyl alcohol	OECD 301A	96 % - Readily - 21 days	-	-

**Conclusion/Summary** : Based on available data, the classification criteria are not met. This product has not been tested for biodegradation.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogP <sub>ow</sub>	BCF	Potential
benzyl alcohol	1,1	-	low
m-fenilenbis(methylamine)	0,18	2,691534803	low

### 12.4 Mobility in soil

## SECTION 12: Ecological information

**Soil/water partition coefficient (K<sub>oc</sub>)** : Not available.

**Mobility** : Not available.

### 12.5 Results of PBT and vPvB assessment

**PBT** : Not applicable.

**vPvB** : Not applicable.

**12.6 Other adverse effects** : No known significant effects or critical hazards.

## SECTION 13: Disposal considerations

### 13.1 Waste treatment methods

#### Product

**Methods of 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. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

**Hazardous waste** : Yes.

**Disposal considerations** : Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned. For further information, contact your local waste authority.

#### European waste catalogue (EWC)

The European Waste Catalogue classification of this product, when disposed of as waste, is:

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other dangerous substances

#### Packaging




**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Disposal considerations** : Using information provided in this safety data sheet, advice should be obtained from the relevant waste authority on the classification of empty containers. Empty containers must be scrapped or reconditioned. Not emptied containers are hazardous waste.

**Special precautions** : 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.

## SECTION 14: Transport information

## SECTION 14: Transport information

	ADR/RID	IMDG	IATA
<b>14.1 UN number</b>	UN 2735	UN 2735	UN 2735
<b>14.2 UN proper shipping name</b>	Amines, liquid, corrosive, n.o.s. [polymethylenecyclohexanamine, m-fenilenbis(methylamine)]	Amines, liquid, corrosive, n.o.s. [polymethylenecyclohexanamine, m-fenilenbis(methylamine)]	Amines, liquid, corrosive, n.o.s. [polymethylenecyclohexanamine, m-fenilenbis(methylamine)]
<b>14.3 Transport hazard class(es)</b>	8 	8 	8 
<b>14.4 Packing group</b>	III	III	III
<b>14.5 Environmental hazards</b>	No.	No.	No.
<b>Additional information</b>	<b>Limited quantity:</b> LQ7  <b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4  ADR Tunnel code: (E)	<b>Emergency schedules (EmS):</b> F-A + S-B  <b>Remarks:</b> (≤ 5L: ) Limited Quantity - ADR/IMDG 3.4.6	<b>Passenger and Cargo Aircraft</b> Quantity limitation: 5 L Packaging instructions: 852 <b>Cargo Aircraft Only</b> Quantity limitation: 60 L Packaging instructions: 856 <b>Limited Quantities - Passenger Aircraft</b> Quantity limitation: 1 L Packaging instructions: Y 841

**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.

## SECTION 15: Regulatory information

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

The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.

**CN code** : 3209 90 00

#### EU Regulation (EC) No. 1907/2006 (REACH)

##### Annex XIV - List of substances subject to authorisation

###### Annex XIV

None of the components are listed.

###### Substances of very high concern

None of the components are listed.

**Annex XVII - Restrictions** : Not applicable.  
on the manufacture,  
placing on the market  
and use of certain  
dangerous substances,  
mixtures and articles

##### Other EU regulations

## SECTION 15: Regulatory information

**VOC for Ready-for-Use Mixture** : IIA/j. Two-pack reactive performance coatings for specific end use such as floors.  
EU limit value for this product : 550g/l (2007) 500g/l (2010.)  
This product contains a maximum of 35 g/l VOC.

**Europe inventory** : Not determined.

**15.2 Chemical Safety Assessment** : This product contains substances for which Chemical Safety Assessments are still required.

## SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

**Abbreviations and acronyms** : ATE = Acute Toxicity Estimate  
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]  
DMEL = Derived Minimal Effect Level  
DNEL = Derived No Effect Level  
EUH statement = CLP-specific Hazard statement  
PBT = Persistent, Bioaccumulative and Toxic  
PNEC = Predicted No Effect Concentration  
RRN = REACH Registration Number  
vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Acute Tox. 4, H302	Expert judgment
Acute Tox. 4, H332	On basis of test data
Skin Corr. 1B, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment
Skin Sens. 1B, H317	Expert judgment
Aquatic Chronic 3, H412	Expert judgment

**Full text of abbreviated H statements** : H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H315 Causes skin irritation.  
H317 May cause an allergic skin reaction.  
H318 Causes serious eye damage.  
H331 Toxic if inhaled.  
H332 Harmful if inhaled.  
H373 May cause damage to organs through prolonged or repeated exposure.  
H411 Toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.

**Full text of classifications [CLP/GHS]** : Acute Tox. 3, H331 ACUTE TOXICITY: INHALATION - Category 3  
Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4  
Acute Tox. 4, H332 ACUTE TOXICITY: INHALATION - Category 4  
Aquatic Chronic 2, H411 AQUATIC TOXICITY (CHRONIC) - Category 2  
Aquatic Chronic 3, H412 AQUATIC TOXICITY (CHRONIC) - Category 3  
Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
Skin Corr. 1A, H314 SKIN CORROSION/IRRITATION - Category 1A  
Skin Corr. 1B, H314 SKIN CORROSION/IRRITATION - Category 1B  
Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2  
Skin Sens. 1B, H317 SKIN SENSITIZATION - Category 1B  
STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) [liver] - Category 2

**Full text of abbreviated R phrases** : R23- Toxic by inhalation.  
R22- Harmful if swallowed.  
R20/22- Harmful by inhalation and if swallowed.  
R48/22- Harmful: danger of serious damage to health by prolonged exposure if swallowed.  
R34- Causes burns.  
R35- Causes severe burns.

## SECTION 16: Other information

R38- Irritating to skin.  
R43- May cause sensitisation by skin contact.  
R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.  
R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**Full text of classifications [DSD/DPD]** : T - Toxic  
C - Corrosive  
Xn - Harmful  
Xi - Irritant  
N - Dangerous for the environment

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**Version** : 1

### Notice to reader

***The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfil the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.***