Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758

atco[®] SAFETY DATA SHEET

Bitu-Mend Pour and Restore - Curing Agent

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

- **1.1 Product identifier**
- : Bitu-Mend Pour and Restore Curing Agent
- Product name Product description Product type UFI
- : repair product
- Liquid.
- : RHD0-S0EP-R00F-YF9Y

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

Identified uses				
Consumer use Professional use Industrial use				
Uses a	dvised against	Reason		
None identified.		-		

1.3 Details of the supplier of the safety data sheet

Watco UK Limited Eastgate Court 195-205 High Street Guildford Surrey GU1 3EH Telephone no.: +44 (0) 1483 425000 (08:00 - 18:00) Fax no.: +44 (0) 1483 428888 e-mail address of person : rpmeurohas@rustoleum.eu responsible for this SDS

1.4 Emergency telephone number

National advisory body/Poison Centre

Supplier

Telephone number United Kingdom: : +44 870 8200418 / +44 2038073798 Great Britain

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 Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Repr. 2, H361fd STOT RE 1, H372 Aquatic Chronic 2, H411 The product is classified as hazardous according to Regulation (EC) 1272/2008 as amended.

SECTION 2: Hazards identification

See Section 16 for the full text of the H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

2.2 Label elements	
Hazard pictograms	
Signal word	: Danger
Hazard statements	 H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction. H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child. H372 - Causes damage to organs through prolonged or repeated exposure. H411 - Toxic to aquatic life with long lasting effects.
Precautionary statements	
General	 P103 - Read carefully and follow all instructions. P102 - Keep out of reach of children. P101 - If medical advice is needed, have product container or label at hand.
Prevention	 P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing and eye or face protection. P273 - Avoid release to the environment. P260 - Do not breathe vapour.
Response	 P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. P301 + P310, P330, P331 - IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. P303 + P361 + P353, P310 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. P305 + P351 + P338, P310 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.
Storage	: P405 - Store locked up.
Disposal	 P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	 Phenol, styrenated 2-piperazin-1-ylethylamine 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine 2,4,6-tris(dimethylaminomethyl)phenol
Supplemental label elements	: Not applicable.
Supplemental label elements : Detergents - Regulation (EC) No 907/2006	: 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 requiren	<u>ients</u>
Containers to be fitted with child-resistant fastenings	: Yes, applicable.

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SECTION 2: Hazards identification

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 3: Composition/information on ingredients

: Mixture

3.2 Mixtures

United Kingdom: Great Britain

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Phenol, styrenated	REACH #: 01-2119980970-27 EC: 262-975-0 CAS: 61788-44-1	≥25 - ≤50	Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411	-	[1]
2-piperazin-1-ylethylamine	REACH #: 01-2119471486-30 EC: 205-411-0 CAS: 140-31-8 Index: 205-411-0	≥25 - ≤50	Acute Tox. 4, H302 Acute Tox. 3, H311 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 2, H361 STOT RE 1, H372 Aquatic Chronic 3, H412	ATE [Oral] = 1470 mg/kg ATE [Dermal] = 866 mg/kg	[1]
2,2,4(or 2,4,4)- trimethylhexane- 1,6-diamine	REACH #: 01-2119560598-25 EC: 247-063-2 CAS: 25513-64-8	≤3	Acute Tox. 4, H302 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	ATE [Oral] = 910 mg/kg	[1]
Amines, coco alkyl	REACH #: 01-2119473798-17 EC: 262-977-1 CAS: 61788-46-3 Index: 612-285-00-4	≤3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT SE 3, H335 STOT RE 2, H373 (gastrointestinal tract, immune system, liver) (oral) Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 1300 mg/kg STOT RE 2, H373: C ≥ 10% M [Acute] = 10 M [Chronic] = 10	[1]
2,4,6-tris (dimethylaminomethyl) phenol	REACH #: 01-2119560597-27 EC: 202-013-9 CAS: 90-72-2	≤3	Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317	-	[1]
			See Section 16 for the full text of the H statements declared above.		

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SECTION 3: Composition/information on ingredients

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, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

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

Туре

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of first aid n	neasures
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
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 symptor Over-exposure signs/symptor	ns and effects, both acute and delayed otoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations

SECTION 4: First aid measures

Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

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.

SECTION 5: Firefighting measures

Ŭ		5
5.1 Extinguishing media		
Suitable extinguishing media	:	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	:	None known.
5.2 Special hazards arising f	fron	n the substance or mixture
Hazards from the substance or mixture	:	In a fire or if heated, a pressure increase will occur and the container may burst. This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products	:	Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides metal oxide/oxides
5.3 Advice for firefighters		
Special protective actions for fire-fighters	:	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.
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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel fro entering. Do not touch or walk through spilt material. Do not breathe vapour or Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.						
For emergency responders	in	formation i	d clothing is required to in Section 8 on suitable in "For non-emergency	e and unsuitable mate			
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SECTION 6: Accidental release measures

6.2 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. Collect spillage.
6.3 Methods and material for	со	ntainment and 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. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.
6.4 Reference to other sections	:	See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance.

7.1 Precautions for safe handling

Protective measures :	Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Advice on general soccupational hygiene	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. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

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. Store locked up. 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. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
E2	200 tonne	500 tonne

SECTION 7: Handling and storage

7.3 Specific end use(s)

Recommendations

: Not available.

Industrial sector specific

- : Not available.
- solutions

SECTION 8: Exposure controls/personal protection

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

Occupational exposure limits

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	Туре	Exposure	Value	Population	Effects
2,4,6-tris(dimethylaminomethyl) phenol	DNEL	Long term Inhalation	0,31 mg/m³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
2,4,6-tris(dimethylaminomethyl)phenol	Fresh water	0,84 mg/l	-
xylene (mixture of isomeres)	Fresh water	0,327 mg/l	Sensitivity Distribution
	Marine water	0,327 mg/l	Sensitivity Distribution
	Fresh water sediment	12,46 mg/kg	Equilibrium Partitioning
	Marine water sediment	12,46 mg/kg	Equilibrium Partitioning
	Soil	2,31 mg/kg	Equilibrium Partitioning
	Sewage Treatment	6,58 mg/l	-
	Plant		
ethylbenzene	Fresh water	0,1 mg/l	-
	Marine water	0,01 mg/l	-
	Fresh water sediment	13,7 mg/kg	-
	Marine water sediment	1,37 mg/kg	-
	Soil	2,68 mg/kg	-
	Sewage Treatment	9,6 mg/l	-
	Plant		
2-methylpropan-1-ol	Fresh water	0,4 mg/l	-
	Marine water	0,04 mg/l	-
	Sewage Treatment	10 mg/l	-
	Plant		
	Fresh water sediment	1,52 mg/kg	-
	Marine water sediment	0,125 mg/kg	-
	Soil	0,0699 mg/kg	-

8.2 Exposure controls

SECTION 8: Exposure controls/personal protection

Appropriate engineering controls	: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
Individual protection measu	<u>res</u>
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 eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. Use eye protection according to EN 166. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead. Recommended: (EN 166) chemical splash goggles and/or face shield. or full-face mask

Skin 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.

Hand protection	: 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. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. > 8 hours (breakthrough time): (EN 374) neoprene (0.65mm) butyl rubber (0.6 mm)
	The recommendation for the type or types of glove to use when handling this product is based on information from the following source: EN374. 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	: 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. Recommended: (EN 467) Overalls buttoned to the neck and wrist. or lab coat or safety apron
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	: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: organic vapour (Type A) and particulate filter (as filter combination A-P2) (EN 141)
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physica	a	na chemical properties
Physical state	:	Liquid.
Colour	:	Amber.
Odour	:	Amine-like.
Odour threshold	1	Not available.
Melting point/freezing point	÷	Not available.
Initial boiling point and boiling range	- 1	Not relevant due to nature of the product.
Flammability (solid, gas)	:	Not available.
Lower and upper explosion limit	:	Not available.
Flash point	:	Closed cup: >100°C (>212°F) [Literature]
Auto-ignition temperature	÷	Not relevant due to nature of the product.
Decomposition temperature	÷	Not available.
рН	÷	Not applicable. [Conc. (% w/w): 100%] [Literature]
pH : Justification	÷	Product is non-polar/aprotic.
Viscosity	1	Dynamic (room temperature): >450 mPa·s [Literature] Kinematic (40°C): >400 mm²/s [Literature]
Solubility(ies)	1	
Not available.		
Solubility in water	:	Not available.
Partition coefficient: n-octanol/ water	:	Not applicable.
Vapour pressure	:	0 to 1,1 kPa (0 to 8,25 mm Hg) [calculated.]
Evaporation rate	:	Not available.
Relative density	:	1,1
Density	:	1,1 g/cm³ [20°C (68°F)] [DIN 53217]
Vapour density	:	Not available.
Explosive properties	:	Not available.
Oxidising properties	1	Not available.
Particle characteristics		
Median particle size	;	Not applicable.

9.1 Information on basic physical and chemical properties

SECTION 10: Stability and reactivity

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10.5 Incompatible materials	: No specific data.							
10.4 Conditions to avoid	: No specific data.							
10.3 Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.							
10.2 Chemical stability	: The product is stable.							
10.1 Reactivity	: No specific test data related to reactivity available for this product or its ingredients.							

SECTION 10: Stability and reactivity

10.6 Hazardous

decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Phenol, styrenated	LD50 Dermal	Rabbit	>5010 mg/kg	-
	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	2500 mg/kg	-
	LD50 Oral	Rat	>2000 mg/kg	-
2-piperazin-1-ylethylamine	LD50 Dermal	Rabbit	880 mg/kg	-
	LD50 Dermal	Rabbit	880 uĽ/kg	-
	LD50 Dermal	Rat	866 mg/kg	-
	LD50 Oral	Rat	1470 mg/kg	-
	LD50 Oral	Rat	2140 mg/kg	-
2,2,4(or 2,4,4)-	LD50 Oral	Rat	910 mg/kg	-
trimethylhexane-1,6-diamine			0.0	
Amines, coco alkyl	LD50 Oral	Rat	1300 mg/kg	-
2,4,6-tris	LD50 Dermal	Rabbit	1242 mg/kg	-
(dimethylaminomethyl)				
phenol				
-	LD50 Oral	Rat	1673 mg/kg	-

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

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Phenol, styrenated	2500	N/A	N/A	N/A	N/A
2-piperazin-1-ylethylamine	1470	866	N/A	N/A	N/A
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	910	N/A	N/A	N/A	N/A
Amines, coco alkyl	1300	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Phenol, styrenated	Eyes - Mild irritant	Rabbit	-	0.1 Mililiters	-
•	Skin - Mild irritant	Rabbit	-	0.5 Mililiters	-
2-piperazin-1-ylethylamine	Eyes - Moderate irritant	Rabbit	-	24 hours 20 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 5 milligrams	-
2,2,4(or 2,4,4)- trimethylhexane-1,6-diamine	Skin - Severe irritant	Rabbit	-	-	-
2,4,6-tris (dimethylaminomethyl) phenol	Eyes - Severe irritant	Rabbit	-	24 hours 50 Micrograms	-
	Skin - Mild irritant	Rat	-	0.025 Mililiters	-
	Skin - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Severe irritant	Rat	-	0.25 Mililiters	-

Skin

Eyes

: Causes serious eye damage.

: Causes severe skin burns and eye damage.

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SECTION 11: Toxicological information

: Causes damage to organs through prolonged or repeated exposure.

Respiratory Sensitisation

Product/ingredient name	Route of exposure	Species	Result
2,4,6-tris (dimethylaminomethyl) phenol	skin	Guinea pig	Not sensitizing

Conclusion/Summary

Skin	: May cause an allergic skin reaction.

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

Carcinogenicity

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
2,4,6-tris (dimethylaminomethyl) phenol	-	-	Negative	Rat	Oral	28 days

Conclusion/Summary

Teratogenicity

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

: May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Amines, coco alkyl	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
2-piperazin-1-ylethylamine Amines, coco alkyl	Category 1 Category 2	- oral	- gastrointestinal tract, immune system, liver

Aspiration hazard

Product/ingredient name	Result
Amines, coco alkyl	ASPIRATION HAZARD - Category 1

Information on likely routes : Not available. of exposure

Potential acute health effects

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

Symptoms related to the physical, chemical and toxicological characteristics

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SECTION 11: Toxicological information

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations

Delayed and immediate effect	:ts	as well as chronic effects from short and long-term exposure
Short term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Long term exposure		
Potential immediate effects	:	Not available.
Potential delayed effects	1	Not available.
Potential chronic health eff	<u>ect</u>	<u>s</u>
Not available.		
Conclusion/Summary	:	Based on available data, the classification criteria are not met.
General	:	Causes damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	:	No known significant effects or critical hazards.
Reproductive toxicity	:	Suspected of damaging fertility. Suspected of damaging the unborn child.

11.2 Information on other hazards

11.2.1 Endocrine disrupting propertiesNot available.11.2.2 Other informationNot available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-piperazin-1-ylethylamine	Acute LC50 2190000 µg/l Fresh water	Fish - Pimephales promelas	96 hours
Amines, coco alkyl	Acute EC50 0,09 mg/l	Daphnia spec.	48 hours
	Acute LC50 0,24 mg/l	Fish	96 hours
	Acute NOEC 0,032 mg/l	Daphnia spec.	48 hours
2,4,6-tris	Acute EC50 84 mg/l	Algae	72 hours
(dimethylaminomethyl)			
phenol		Fish	
	Acute LC50 180 to 240 mg/l	Fish	96 hours
	Acute LC50 175 mg/l	Fish - Cyprinus carpio	96 hours

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

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Amines, coco alkyl 2,4,6-tris (dimethylaminomethyl) phenol	OECD 301D OECD 301D	91 % - Readily - 28 days 4 % - Not readily - 28 days	10 mg/l ThCO2 -	-
Conclusion/Summary		able data, the classification crite biodegradation.	ria are not met. Th	is product has not

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Amines, coco alkyl 2,4,6-tris (dimethylaminomethyl) phenol	-	-	Readily Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
2-piperazin-1-ylethylamine 2,2,4(or 2,4,4)-	-1,48 -0,3	-	low low
trimethylhexane-1,6-diamine Amines, coco alkyl 2,4,6-tris (dimethylaminomethyl)	>3 0,219	>100 -	low low
phenol			

12.4 Mobility in soil	
Soil/water partition coefficient (Koc)	: Not available.
Mobility	: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance.

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.
European waste catalog	ue (EWC)

07 07 04* other organic solvents, washing liquids and mother liquors	

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

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number or ID number	UN2735	UN2735	UN2735	UN2735
14.2 UN proper shipping name	Polyamines, liquid, corrosive, N.O.S. (2-piperazin- 1-ylethylamine)	Polyamines, liquid, corrosive, N.O.S. (2-piperazin- 1-ylethylamine)	Polyamines, liquid, corrosive, N.O.S. (2-piperazin- 1-ylethylamine). Marine pollutant (Phenol, styrenated)	Polyamines, liquid, corrosive, N.O.S. (2-piperazin- 1-ylethylamine)
14.3 Transport hazard class(es)	8			8
14.4 Packing group	11	11	11	11
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.
Additional information	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Limited quantity</u> : ≤ 1L <u>Tunnel code</u> (E)	The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. <u>Emergency</u> <u>schedules</u> : F-A, S-B <u>Remarks</u> : ≤ 1L: Limited Quantity - IMDG 3.4	The environmentally hazardous substance mark may appear if required by other transportation regulations. Quantity limitation Passenger and Cargo Aircraft: 1 L. Packaging instructions: 851. Cargo Aircraft Only:

SECTION 14: Transport information		
	30 L. Packaging instructions: 855. Limited Quantities - Passenger Aircraft: 0,5 L. Packaging instructions: Y840.	

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

14.7 Transport in bulk	:	Not available.
according to IMO		
instruments		

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mi	xture
Other EU regulations	

VOC for Ready-for-Use Mixture	: Not applicable.
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
United Kingdom: Great Bri	<u>tain</u>
<u>UK (GB) /REACH</u>	
Annex XIV - List of substar	nces subject to authorisation
Annex XIV	
None of the components a	re listed.
Substances of very high of None of the components a	
Ozone depleting substance Not listed.	<u>es</u>
Prior Informed Consent (Pl Not listed.	<u>C)</u>
Persistent Organic Polluta Not listed.	<u>nts</u>
Aerosol dispensers	:
Seveso Directive	
This product is controlled une	der the Seveso Directive.
Danger criteria	
Category	
E2	

SECTION 15: Regulatory information

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances,

mixtures and articles

International regulations

Stockholm Convention on Persistent Organic Pollutants

List name	Ingredient name	Status
Not listed.		

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

List name	Ingredient name	Status
Not listed.		
CN acida : 2214 10 10 00	•	

CN code : 3214 10 10	00	
Inventory list		
Australia	:	All components are listed or exempted.
Canada	:	At least one component is not listed in DSL but all such components are listed in NDSL.
China	:	All components are listed or exempted.
Eurasian Economic Union	:	Russian Federation inventory: Not determined.
Japan	:	Japan inventory (CSCL): All components are listed or exempted. Japan inventory (ISHL): Not determined.
New Zealand	:	All components are listed or exempted.
Philippines	:	All components are listed or exempted.
Republic of Korea	:	Not determined.
Taiwan	:	Not determined.
Thailand	:	Not determined.
Turkey	:	Not determined.
United States	:	Not determined.
Viet Nam	:	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	on 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 N/A = Not available PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number SGG = Segregation Group vPvB = Very Persistent and Very Bioaccumulative

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SECTION 16: Other information

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

Classification	Justification
Skin Corr. 1B, H314	Expert judgment
Eye Dam. 1, H318	Expert judgment
Skin Sens. 1A, H317	Expert judgment
Repr. 2, H361fd	Expert judgment
STOT RE 1, H372	Expert judgment
Aquatic Chronic 2, H411	Expert judgment

Full text of abbreviated H statements

Full text of abbreviated H Sta			
United Kingdom: Great Britain			
Full text of abbreviated H statements	 Harmful if swallowed. May be fatal if swallowed and enters airways. Toxic in contact with skin. Causes severe skin burns and eye damage. Causes skin irritation. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May cause respiratory irritation. Suspected of damaging fertility or the unborn child. Suspected of damaging fertility. Suspected of damaging the unborn child. Causes damage to organs through prolonged or repeated exposure. Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects. Toxic to aquatic life with long lasting effects. 		
Full text of classifications. [CLP/GHS]	412 Harmful to aquatic life with long lasting effects. cute Tox. 3 ACUTE TOXICITY - Category 3 cute Tox. 4 ACUTE TOXICITY - Category 4 quatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 lowatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 hronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 quatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 quatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 quatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3 hronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 quatic LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 spinoir SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 gep Dam. 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 kin Corr. 1A SKIN CORROSION/IRRITATION - Category 1 kin Corr. 1B SKIN CORROSION/IRRITATION - Category 1 kin Corr. 1C SKIN CORROSION/IRRITATION - Cate	:E -	
Date of printing	/12/2022		
Date of printing Date of issue/ Date of revision	/12/2022		
Date of previous issue	/12/2022		
Version			

SECTION 16: Other information

Notice to reader

IMPORTANT NOTE: The information in this Safety Data Sheet is based on the present state of knowledge and current legislation. It provides guidance on health, safety and environmental aspects of the product and should not be construed as any guarantee of technical performance or suitability for particular applications. The information contained in this data sheet (as may be amended from time to time) is not intended to be exhaustive and is presented in good faith and believed to be correct as of the date on which it is prepared. It is the user's responsibility to verify that this data sheet is current prior to using the product to which it relates. Persons using the information must make their own determinations as to the suitability of the relevant product for their purposes prior to use. Where those purposes are other than as specifically recommended in this safety data sheet, then the user uses the product at their own risk.

MANUFACTURER'S DISCLAIMER: the conditions, methods and factors affecting the handling, storage, application, use and disposal of the product are not under the control and knowledge of the manufacturer. Therefore the manufacturer does not assume responsibility for any adverse events which may occur in the handling, storage, application, use, misuse or disposal of the product and, so far as permitted by applicable law, the manufacturer expressly disclaims liability for any and all loss, damages and/or expenses arising out of or in any way connected to the storage, handling, use or disposal of the product. Safe handling, storage, use and disposal are the responsibility of the users. Users must comply with all applicable health and safety laws.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.