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

SAFETY DATA SHEET



Jotamastic 87 Standard Comp B

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

1.1 Product identifier	
Product name	: Jotamastic 87 Standard Comp B
Product code	: 527
Product description	: Hardener.
Product type	: Liquid.
Other means of identification	: Not available.
1.2 Relevant identified uses	s of the substance or mixture and uses advised against
Use in coatings - Profession	nal use
1.3 Details of the supplier of	f the safety data sheet
Jotun A/S	Jotun Paints (Europe) Ltd.
P.O.Box 2021 3202 Sandefjord	Stather Road
Norway	Flixborough, Scunthorpe North Lincolnshire
Tel: + 47 33 45 70 00	DN15 8RR
Fax: +47 33 45 72 42	England
E-mail: SDSJotun@jotun.nc	
	Tel: +44 17 24 40 00 00
	Fax: +44 17 24 40 01 00
1.4 Emergency telephone n	umber
National advisory body/Po	<u>bison Centre</u>
Telephone number	: Contact NHS Direct; phone 0845 4647 or 111. Open 24/7.
<u>Supplier</u>	
Telephone number	: +47 33 45 70 00 Jotun Norway (head office)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to UK CLP/GHS

Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

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

Hazard pictograms



Date of issue/Date of revision

Signal word

SECTION 2: Hazards identification

Hazard statements	: H314 - Causes severe skin burns and eye damage. H317 - May cause an allergic skin reaction.
Precautionary statements	
General	: Not applicable.
Prevention	 P280 - Wear protective gloves, protective clothing and eye or face protection. P261 - Avoid breathing vapour.
Response	 P304 + P310 - IF INHALED: Immediately call a POISON CENTER or doctor. 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. P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water. P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. 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	: Not applicable.
Disposal	: P501 - 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 requirem	ients
Containers to be fitted with child-resistant fastenings	: Not applicable.
Tactile warning of danger	: Not 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 not result in classification	: None known.

SECTION 3: Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification	Туре	
benzyl alcohol	REACH #: 01-2119492630-38 EC: 202-859-9 CAS: 100-51-6 Index: 603-057-00-5	≥10 - ≤25	Acute Tox. 4, H302 Acute Tox. 4, H332 Eye Irrit. 2, H319	[1]	
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	REACH #: 01-2119514687-32 EC: 220-666-8 CAS: 2855-13-2 Index: 612-067-00-9	≤14	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317	[1]	
2,2,4(or 2,4,4)-trimethylhexane-	REACH #:	≤7.3	Acute Tox. 4, H302	[1]	

SECTION 3: Composition/information on ingredients

1,6-diamine	01-2119560598-25 EC: 247-063-2 CAS: 25513-64-8	Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317
		See Section 16 for the full text of the H statements declared above.

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.

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

	incusures
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

4.2 Most important symptoms and effects, both acute and delayed

thoroughly with water before removing it, or wear gloves.

SECTION 4: First aid measures

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. 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.

Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine. May produce an allergic reaction.

Over-exposure signs/symptoms

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

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, CO2, powders, water spray. media

Unsuitable extinguishing : Do not use water jet. media

5.2 Special hazards arising from 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.
Hazardous combustion products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide nitrogen oxides carbonyl halides

5.3 Advice for firefighters

SECTION 5: Firefighting measures

-		
Special protective actions for fire-fighters	Promptly isolate the scene by removing all persons from the vicinity of the there is a fire. No action shall be taken involving any personal risk or withor suitable training.	
Special protective equipment for fire-fighters	Fire-fighters should wear appropriate protective equipment and self-contain breathing apparatus (SCBA) with a full face-piece operated in positive presi mode.	

SECTION 6: Accidental release measures

6.1 Personal precautions, pro	ote	ctive 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 from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
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	:	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).
6.3 Methods and material for	' co	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 (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.
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. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

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. Do not get in eyes or on skin or clothing. Do not breathe vapour or mist. Do not ingest. 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 occupational 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.

Jotamastic 87 Standard Comp B

SECTION 7: Handling and storage

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.

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s) Recommendations

: Not available. : Not available.

Industrial sector specific solutions

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring : Reference should be made to appropriate monitoring standards. 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
penzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg	General	Systemic
	DILLE	Long tonin Donna	bw/day	population	Cyclonic
	DNEL	Long term Inhalation	5.4 mg/m ³	General	Systemic
	DNEL	Long term Dermal	8 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Oral	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	22 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	27 mg/m³	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	110 mg/m ³	Workers	Systemic
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	DNEL	Long term Oral	0.526 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Short term Inhalation	0.073 mg/ m³	Workers	Local
	DNEL	Long term Inhalation	0.073 mg/ m³	Workers	Local
	DNEL	Long term Oral	0.3 mg/kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.3 mg/kg bw/day	General population	Systemic
2,2,4(or 2,4,4)-trimethylhexane- 1,6-diamine	DNEL	Long term Oral	0.05 mg/ kg bw/day	General population [Consumers]	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Long term Oral	0.05 mg/ kg bw/day	General population	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
penzyl alcohol	Fresh water	1 mg/l	-
	Marine	0.1 mg/l	-
	Sewage Treatment	39 mg/l	-
	Plant	-	
	Fresh water sediment	5.27 mg/kg dwt	-
	Marine water sediment	0.527 mg/kg dwt	-
	Soil	0.456 mg/kg dwt	-
3-aminomethyl-	Fresh water	0.06 mg/l	-
3,5,5-trimethylcyclohexylamine			
	Marine	0.006 mg/l	-
	Sewage Treatment	3.18 mg/l	-
	Plant		
	Fresh water sediment	5.784 mg/kg dwt	-
	Marine water sediment	0.578 mg/kg dwt	-
	Soil	1.121 mg/kg dwt	-
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	Fresh water	0.0295 mg/l	-
	Marine	0.00295 mg/l	-
	Sewage Treatment	72 mg/l	-
	Plant		
	Fresh water sediment	0.18 mg/kg dwt	-
	Marine water sediment	0.018 mg/kg dwt	-
	Soil	0.019 mg/kg dwt	-

8.2 Exposure controls

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 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 eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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

SECTION 8: Exposure controls/personal protection

Wear suitable gloves tested to ISO 374-1:2016.

Recommended, gloves(breakthrough time) > 8 hours: 4H/Silver Shield® (> 0.07 mm), butyl rubber (> 0.4 mm), fluor rubber (> 0.35 mm), Viton® (> 0.7 mm) May be used, gloves(breakthrough time) 4 - 8 hours: nitrile rubber (> 0.75 mm), PVC (> 0.5 mm)

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

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.
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 a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387 (as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.
Environmental exposure controls	: Do not allow to enter drains or watercourses.

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 physical and chemical properties

<u>Appearance</u>						
Physical state	: Liquid.					
Colour	Colourless.					
Odour	: Characteristic.					
Odour threshold	: Not applicable.					
Melting point/freezing point	: Not applicable.					
Initial boiling point and boiling range	: Lowest known value: 205.3°C (401.5°F) (benzyl alcohol). Weighted average: 224.77°C (436.6°F)					
Flammability	: Not applicable.					
Upper/lower flammability or explosive limits	: 1.2 - 13%					
Flash point	: Not applicable.					
Auto-ignition temperature	: Not applicable.					
Decomposition temperature	: Not available.					
рН	Not applicable.					
Viscosity	Kinematic (40°C): >20.5 mm²/s					
Solubility(ies)						
Media	Result					
<mark>¢o</mark> ld water	Not soluble					
hot water	Not soluble					
Partition coefficient: n-octanol/ water	/ : Not available.					
Vapour pressure	: Highest known value: 0.007 kPa (0.05 mm Hg) (at 20°C) (benzyl alcohol). Weighted average: 0.005 kPa (0.04 mm Hg) (at 20°C)					
Evaporation rate	: 0.007 (benzyl alcohol) compared with butyl acetate					
Density	: 1.02 g/cm ³					
Vapour density	: Highest known value: 3.7 (Air = 1) (benzyl alcohol).					
Date of issue/Date of revision	: 05.04.2024 Date of previous issue : 21.04.2023 Version : 1.03 8/14					

SECTION 9: Physical and chemical properties

Explosive properties	1
Oxidising properties	1
Particle characteristics	
Median particle size	1

: Not available.

Not applicable.

Not available.

9.2 Other information

No additional information.

SECTION 10: Stabilit	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	1	Under normal conditions of storage and use, hazardous reactions will not occur.		
10.4 Conditions to avoid	1	When exposed to high temperatures may produce hazardous decomposition products.		
10.5 Incompatible materials	1	Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.		
10.6 Hazardous decomposition products	:	Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.		

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. 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.

Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
 enzyl alcohol 3-aminomethyl- 3,5,5-trimethylcyclohexylamine 	LD50 Oral LD50 Oral	Rat Rat	1230 mg/kg 1030 mg/kg	-

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)
	2112.0	N/A	N/A	45.3	N/A
benzyl alcohol	1230	N/A	N/A	11	N/A
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1030	N/A	N/A	N/A	N/A
2,2,4(or 2,4,4)-trimethylhexane-1,6-diamine	500	N/A	N/A	N/A	N/A

Irritation/Corrosion

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation	
benzyl alcohol	Eyes - Mild irritant	Mammal - species unspecified	-	-	-	

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
7 -aminomethyl- 3,5,5-trimethylcyclohexylamine		Mammal - species unspecified	Sensitising
2,2,4(or 2,4,4)- trimethylhexane-1,6-diamine	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects

- Fertility effects
- No known significant effects or critical hazards.No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

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 ph	ysical, chemical and toxicological characteristics
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Other information	: None identified.

SECTION 12: Ecological information

12.1 Toxicity

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

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is not classified as hazardous to the environment.

Product/ingredient name	Result	Species	Exposure
3-aminomethyl- 3,5,5-trimethylcyclohexylamine	Acute EC50 17.4 to 21.5 mg/l Fresh water	Daphnia - Water flea - Daphnia magna	48 hours
	Acute IC50 37 mg/l	Algae	72 hours
2,2,4(or 2,4,4)- trimethylhexane-1,6-diamine	Acute EC50 29.5 mg/l	Algae - Scenedesmus subspicatus	72 hours
	Acute EC50 31.5 mg/l Acute LC50 150 mg/l	Daphnia - Daphnia magna Fish - Leuciscus idus melanotus	24 hours 48 hours

Conclusion/Summary : No known significant effects or critical hazards.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol	-	-	Readily
3-aminomethyl-	-	-	Not readily
3,5,5-trimethylcyclohexylamine			-
2,2,4(or 2,4,4)-	-	-	Not readily
trimethylhexane-1,6-diamine			

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
benzyl alcohol 3-aminomethyl-	0.87 0.99		low low
3,5,5-trimethylcyclohexylamine 2,2,4(or 2,4,4)- trimethylhexane-1,6-diamine	-0.3	-	low

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

SECTION 13: Disp	osal considerations
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.
Waste catalogue	
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.
Type of packaging	Waste catalogue
CEPE Guidelines	15 01 10* packaging containing residues of or contaminated by hazardous substances
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	UN2735	UN2735	UN2735	UN2735
14.2 UN proper shipping name	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl- 3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)- trimethylhexane- 1,6-diamine)	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl- 3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)- trimethylhexane- 1,6-diamine)	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl- 3,5,5-trimethylcyclohexylamine, 2,2,4(or 2,4,4)- trimethylhexane- 1,6-diamine)	Polyamines, liquid, corrosive, n.o.s. (3-aminomethyl- 3,5,5-trimethylcyclohexylamine 2,2,4(or 2,4,4)- trimethylhexane- 1,6-diamine)
14.3 Transport hazard class(es)	8	8	8	8
14.4 Packing group		111	111	111
14.5 Environmental hazards	No.	No.	No.	No.
Additional informa	tion			•
ADR/RID	: <u>Hazard ide</u> <u>Tunnel co</u>	ntification number 80 <u>de</u> (E)		
IMDG		y schedules F-A, S-B n Group: 18 - Alkalis		

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.

Date of issue/Date of revision

SECTION 14: Transport information

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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>UK (GB)/REACH</u>

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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

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

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions : Not listed (integrated pollution prevention and control) -Air Industrial emissions : Not listed (integrated pollution prevention and control) -Water

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

SECTION 15: Regulatory information

15.2 Chemical safety	: This product contains substances for which Chemical Safety Assessments are still	
assessment	required.	

SECTION 16: Other information

Abbreviations and acronyms : ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Deskaging of Substances and Mixtures as amonded by (ELL Exit) Regulations 2010	Indicates informati	on that has changed from previously issued version.
No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB 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	Abbreviations and	 ATE = Acute Toxicity Estimate GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level EUH statement = GB 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

Procedure used to derive the classification

Classification	Justification
Skin Corr. 1A, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method

Full text of abbreviated H statements

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.

Full text of classifications

ACUTE TOXICITY - Category 4	
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1	
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
SKIN CORROSION/IRRITATION - Category 1A	
SKIN CORROSION/IRRITATION - Category 1B	
SKIN SENSITISATION - Category 1	
SKIN SENSITISATION - Category 1A	
	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2 SKIN CORROSION/IRRITATION - Category 1A SKIN CORROSION/IRRITATION - Category 1B SKIN SENSITISATION - Category 1

Date of printing	: 05.04.2024
Date of issue/ Date of revision	: 05.04.2024
Date of previous issue	: 21.04.2023
Version	: 1.03

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.