SAFETY DATA SHEET



Jotamastic SF Comp B

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

1.1 Product identifier

Product name : Jotamastic SF Comp B

UFI : DHYR-E0WT-E00S-A5K7

Product code : 8660

Product description : Hardener.

Product type : Liquid.

Other means of : Not available.

identification

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

Use in coatings - Industrial use
Use in coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun A/S P.O.Box 2021 3202 Sandefjord Norway

Tel: + 47 33 45 70 00 Fax: +47 33 45 72 42 E-mail: SDSJotun@jotun.no

National contact

Jotun Paints Europe (Ltd). Unit K7, Marina Commercial Park Centre Park Road Cork Ireland

Tel: +353 214 965955 Fax: +353 214 965992

SDSJotun@jotun.com

1.4 Emergency telephone number

Poisons Information Centre of Ireland: +353 1 809 3000 (8am-10pm, 7 days a week)

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

STOT RE 2, H373 (heart, kidneys)

Aquatic Acute 1, H400 Aquatic Chronic 1, H410

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 1/17

SECTION 2: Hazards identification

The product is classified as hazardous according to Regulation (EC) 1272/2008 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









Signal word : Danger.

Hazard statements : H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

H317 - May cause an allergic skin reaction.

H373 - May cause damage to organs through prolonged or repeated exposure.

(heart, kidneys)

H410 - Very toxic to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention: P280 - Wear protective gloves, protective clothing and eye or face protection.

P273 - Avoid release to the environment. P260 - Do not breathe vapour or spray.

P270 - Do not eat, drink or smoke when using this product.

Response : P391 - Collect spillage.

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.

Hazardous ingredients: benzenedimethanamine, n-(2-phenylethyl) derivs.

formaldehyde, polymer with benzenamine, hydrogenated

cyclohexanamine, 4,4'-methylenebis-

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

: Not applicable.

fastenings

Tactile warning of danger : Not applicable.

Date of issue/Date of revision: 27.03.2023Date of previous issue: No previous validationVersion: 12/17

SECTION 2: Hazards identification

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

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
benzenedimethanamine, n-(2-phenylethyl) derivs.	EC: 445-790-1 CAS: 404362-22-7	≥25 - ≤50	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 (heart) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg M [Acute] = 1 M [Chronic] = 1	[1]
formaldehyde, polymer with benzenamine, hydrogenated	REACH #: 01-2119541673-38 EC: 603-894-6 CAS: 135108-88-2	≥10 - ≤25	Acute Tox. 3, H301 Skin Corr. 1C, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 2, H373 (kidneys) (oral) Aquatic Chronic 3, H412	ATE [Oral] = 300 mg/kg	[1]
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	ATE [Oral] = 1230 mg/kg ATE [Inhalation (vapours)] = 11 mg/	[1]
cyclohexanamine, 4,4'- methylenebis-	REACH #: 01-2119541673-38 EC: 217-168-8 CAS: 1761-71-3	≤3	Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317 STOT RE 2, H373 (liver)	ATE [Oral] = 500 mg/kg	[1]
salicylic acid	REACH #: 01-2119486984-17 EC: 200-712-3 CAS: 69-72-7	≤1.6	Acute Tox. 4, H302 Eye Dam. 1, H318 Repr. 2, H361d	ATE [Oral] = 500 mg/kg	[1]
			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.

<u>Type</u>

[1] Substance classified with a health or environmental hazard

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

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 3/17

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. 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. 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 benzenedimethanamine, n-(2-phenylethyl) derivs., formaldehyde, polymer with benzenamine, hydrogenated, cyclohexanamine, 4,4'-methylenebis-. 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.

Date of issue/Date of revision: 27.03.2023Date of previous issue: No previous validationVersion: 14/17

SECTION 4: First aid measures

See toxicological information (Section 11)

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing

: Do not use water jet.

media

5.2 Special hazards arising from the substance or mixture Hazards from the : Fire will produce dense black substance or mixture cause a health hazard.

: Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous combustion 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.

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 material 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

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

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another. Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 5/17

SECTION 7: Handling and storage

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.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

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.

Seveso Directive - Reporting thresholds

Danger criteria

	Notification and MAPP threshold	Safety report threshold
E1	100 tonne	200 tonne

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

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

No exposure limit value known.

procedures

Recommended monitoring: 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

Date of issue/Date of revision : 27.03.2023 Version:1 6/17 Date of previous issue : No previous validation

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Туре	Exposure	Value	Population	Effects
benzenedimethanamine, n-	DNEL	Long term	0.002 mg/ m³	General	Local
(2-phenylethyl) derivs.	DNEL	Inhalation Long term Inhalation	0.004 mg/ m ³	population Workers	Local
	DNEL	Long term Oral	0.03 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.03 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.04 mg/m ³		Systemic
	DNEL	Long term Dermal	0.05 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.18 mg/m ³		Systemic
formaldehyde, polymer with benzenamine, hydrogenated	DNEL	Long term Inhalation	0.2 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	2 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	6 mg/kg bw/day	Workers	Systemic
benzyl alcohol	DNEL	Long term Oral	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	5.4 mg/m ³	General population	Systemic
	DNEL	Long term Dermal Short term Oral	8 mg/kg bw/day 20 mg/kg	Workers General	Systemic Systemic
	DNEL	Short term Dermal	bw/day 20 mg/kg	population General	Systemic
	DNEL	Long term	bw/day 22 mg/m ³	population Workers	Systemic
	DNEL	Inhalation Short term	27 mg/m ³	General	Systemic
	DNEL	Inhalation Short term Dermal	40 mg/kg	population Workers	Systemic
	DNEL	Short term	bw/day 110 mg/m³	Workers	Systemic
cyclohexanamine, 4,4'-methylenebis-	DNEL	Inhalation Short term Dermal	0.63 mg/	Workers	Systemic
	DNEL	Short term	kg bw/day 1.5 mg/m³	Workers	Systemic
	DNEL	Inhalation Long term Dermal	0.21 mg/	Workers	Systemic
	DNEL	Long term	kg bw/day 0.5 mg/m³	Workers	Systemic
	DNEL	Inhalation Long term Dermal	0.125 mg/	Workers	Systemic
	DNEL	Long term Oral	kg bw/day 0.125 mg/ kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	0.053 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.13 mg/m ³	Workers	Systemic
salicylic acid	DNEL	Long term Oral	1 mg/kg	General	Systemic

Date of issue/Date of revision: 27.03.2023Date of previous issue: No previous validationVersion: 17/17

SECTION 8: Exposure controls/personal protection

		bw/day	population	
DNEL	Long term Dermal	1 mg/kg	General	Systemic
		bw/day	population	
DNEL	Long term Dermal	2.3 mg/kg	Workers	Systemic
		bw/day		
DNEL	Short term Oral	4 mg/kg	General	Systemic
		bw/day	population	
DNEL	Long term	4 mg/m³	General	Systemic
	Inhalation		population	
DNEL	Long term	5 mg/m³	Workers	Local
	Inhalation			
DNEL	Long term	5 mg/m³	Workers	Systemic
	Inhalation			

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
benzyl alcohol	Fresh water	1 mg/l	-
	Marine	0.1 mg/l	-
	Sewage Treatment Plant	39 mg/l	-
	Fresh water sediment	5.27 mg/kg dwt	-
	Marine water sediment	0.527 mg/kg dwt	-
	Soil	0.456 mg/kg dwt	-
cyclohexanamine, 4,4'-methylenebis-	Fresh water	0.008 mg/l	-
	Marine	0.0008 mg/l	-
	Sewage Treatment Plant	80 mg/l	-
	Fresh water sediment	0.39 mg/kg dwt	-
	Marine water sediment	0.039 mg/kg dwt	-
	Soil	0.072 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 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

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 8/17

SECTION 8: Exposure controls/personal protection

maintenance.

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

Gloves

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

Recommended, gloves(breakthrough time) > 8 hours: Viton® (> 0.7 mm), 4H/Silver Shield® (> 0.07 mm), neoprene (> 0.35 mm)

May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber (> 0.4 mm), nitrile rubber (> 0.4 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

: Personnel should wear antistatic clothing made of natural fibres or of hightemperature-resistant synthetic fibres.

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

Appearance

Physical state : Liquid.
Colour : Colourless.
Odour : Characteristic.
Odour threshold : Not applicable.
Melting point/freezing point : Not applicable.

Initial boiling point and

d : Lowest known value: 205.3°C (401.5°F) (benzyl alcohol). Weighted average:

boiling range

Flammability

227.96°C (442.3°F)

Doming runge

: Not applicable.

Lower and upper explosion

: 1.3 - 13%

limit

Flash point : Closed cup: 95°C

Auto-ignition temperature : Lowest known value: 300°C (572°F) (cyclohexanamine, 4,4'-methylenebis-).

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Kinematic (40°C): >20.5 mm²/s

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not available.

water

Vapour pressure : Highest known value: 0.007 kPa (0.05 mm Hg) (at 20°C) (benzyl alcohol).

Weighted average: 0.003 kPa (0.02 mm Hg) (at 20°C)

Evaporation rate : 0.007 (benzyl alcohol) compared with butyl acetate

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 9/17

SECTION 9: Physical and chemical properties

1.047 g/cm³ **Density**

Vapour density : Highest known value: 3.7 (Air = 1) (benzyl alcohol).

: Not available. **Explosive properties** : Not available. **Oxidising properties**

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

10.3 Possibility of

hazardous reactions

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).

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.

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 may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

decomposition products

SECTION 11: Toxicological information

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

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 benzenedimethanamine, n-(2-phenylethyl) derivs., formaldehyde, polymer with benzenamine, hydrogenated, cyclohexanamine, 4,4'-methylenebis-. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
formaldehyde, polymer with benzenamine, hydrogenated	LD50 Oral	Rat	300 mg/kg	-
benzyl alcohol	LD50 Oral	Rat	1230 mg/kg	-

Acute toxicity estimates

Date of issue/Date of revision : 27.03.2023 10/17 Date of previous issue Version : No previous validation

SECTION 11: Toxicological information

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Jotamastic SF Comp B	488.7	N/A	N/A	47.8	N/A
benzenedimethanamine, n-(2-phenylethyl) derivs.	500	N/A	N/A	N/A	N/A
formaldehyde, polymer with benzenamine, hydrogenated	300	N/A	N/A	N/A	N/A
benzyl alcohol	1230	N/A	N/A	11	N/A
cyclohexanamine, 4,4'-methylenebis-salicylic acid	500 500	N/A N/A	N/A N/A	N/A N/A	N/A N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
benzyl alcohol	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
cyclohexanamine, 4,4'- methylenebis-	Eyes - Severe irritant	Rabbit	-	24 hours 10 microliters	-
salicylic acid	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
benzenedimethanamine, n-(2-phenylethyl) derivs.	skin	Mammal - species unspecified	Sensitising
cyclohexanamine, 4,4'- methylenebis-	skin	Mammal - species unspecified	Sensitising

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Product/ingredient name	Maternal toxicity	Fertility	Developmental toxin	Species	Dose	Exposure
salicylic acid	-	-	Positive		Oral: 150 mg/kg	-

Developmental effects : No known significant effects or critical hazards.Fertility effects : No known significant effects or critical hazards.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

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

Specific target organ toxicity (repeated exposure)

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 11/17

SECTION 11: Toxicological information

Product/ingredient name	Category	Route of exposure	Target organs
benzenedimethanamine, n-(2-phenylethyl) derivs. formaldehyde, polymer with benzenamine, hydrogenated cyclohexanamine, 4,4'-methylenebis-	Category 2 Category 2 Category 2		heart kidneys liver

Aspiration hazard

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 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.

The mixture has been assessed following the summation method of the CLP Regulation (EC) No 1272/2008 and is classified for eco-toxicological properties accordingly. See Sections 2 and 3 for details.

Product/ingredient name	Result	Species	Exposure
cyclohexanamine, 4,4'- methylenebis-	Acute EC50 6.84 mg/l	Daphnia	48 hours
,	Acute IC50 140 mg/l Acute LC50 46 mg/l	Algae Fish	72 hours 96 hours
salicylic acid	Acute LC50 32 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Daphnia longispina - Neonate	21 days

Conclusion/Summary: This material is very toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
benzyl alcohol cyclohexanamine, 4,4'- methylenebis-	-		Readily Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
formaldehyde, polymer with		209 to 219	low
benzenamine, hydrogenated			
benzyl alcohol	0.87	<100	low
cyclohexanamine, 4,4'-	2.03	-	low
methylenebis-			
salicylic acid	2.21 to 2.26	-	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 12/17

SECTION 12: Ecological information

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. 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

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.

Dispose of containers contaminated by the product in accordance with local or national legal provisions.

Type of packaging		European waste catalogue (EWC)
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.

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 13/17

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number or ID number	UN2735	UN2735	UN2735	UN2735
14.2 UN proper shipping name	Polyamines, liquid, corrosive, n.o.s. (benzenedimethanamine, n-(2-phenylethyl) derivs., cyclohexanamine, 4,4'-methylenebis-)	Polyamines, liquid, corrosive, n.o.s. (benzenedimethanamine, n-(2-phenylethyl) derivs., cyclohexanamine, 4,4'-methylenebis-)	Polyamines, liquid, corrosive, n.o.s. (benzenedimethanamine, n-(2-phenylethyl) derivs., cyclohexanamine, 4,4'-methylenebis-). Marine pollutant (benzenedimethanamine, n-(2-phenylethyl) derivs.)	Polyamines, liquid, corrosive, n.o.s. (benzenedimethanamine, n-(2-phenylethyl) derivs., cyclohexanamine, 4,4'-methylenebis-)
14.3 Transport hazard class(es)	8	8	8	8
14.4 Packing group	II	II	II	II
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

ADR/RID

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Hazard identification number 80

Tunnel code (E)

ADN

The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

IMDG

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-A, S-B

IMDG Code Segregation group SGG18 - Alkalis

Segregation Group: 18 - Alkalis

IATA

The environmentally hazardous substance mark may appear if required by other transportation regulations.

user

14.6 Special precautions for : 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 Maritime transport in bulk according to IMO instruments

: Not available.

Date of issue/Date of revision : 27.03.2023 Date of previous issue Version:1 14/17 : No previous validation

SECTION 15: Regulatory information

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

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

Annex XIV - List of substances subject to authorisation

: Not applicable.

: Not available.

: Not applicable.

: Not listed

: Not listed

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

Other EU regulations

VOC for Ready-for-Use

Mixture

VOC

Industrial emissions

(integrated pollution prevention and control) -

Air

Industrial emissions (integrated pollution

prevention and control) -

Water

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

Persistent Organic Pollutants

Not listed.

Seveso Directive

This product may add to the calculation for determining whether a site is within the scope of the Seveso Directive on major accident hazards.

National regulations

Industrial use

: 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.

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.

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 15/17

SECTION 15: Regulatory information

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

15.2 Chemical safety

: No Chemical Safety Assessment has been carried out.

assessment

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and

: ATE = Acute Toxicity Estimate

acronyms CLP =

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

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

Classification	Justification
Acute Tox. 4, H302	Calculation method
Skin Corr. 1B, H314	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
STOT RE 2, H373 (heart, kidneys)	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

Full text of abbreviated H statements

H301	Toxic if swallowed.
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.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very 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	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Corr. 1C	SKIN CORROSION/IRRITATION - Category 1C
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Date of printing : 27.03.2023

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 16/17

SECTION 16: Other information

Date of issue/ Date of

: 27.03.2023

revision

Date of previous issue : No previous validation

Version : 1

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.

Date of issue/Date of revision : 27.03.2023 Date of previous issue : No previous validation Version : 1 17/17