SAFETY DATA SHEET



JOTUN Multicolor Solvent-Free RE

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

1.1 Product identifier

Product name : JOTUN Multicolor Solvent-Free RE

UFI : F28P-44VE-Q00Q-W45D

Product code 52450

Product description : Colouring material. Waterborne paint.

Product type : Liquid. : Not available. Other means of

identification

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

Use in coatings - Industrial 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

1.4 Emergency telephone number

Norwegian National Poison Centre: +47 22 59 13 00

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]

Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 3, H412

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 : Warning.

Hazard statements H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

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SECTION 2: Hazards identification

Precautionary statements

General : Not applicable.

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

P273 - Avoid release to the environment.

P261 - Avoid breathing vapour.

Response : P362 + P364 - Take off contaminated clothing and wash it 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 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

: Contains preservatives: C(M)IT/MIT (3:1) and IPBC. Risk of skin sensitization.

Storage : Not applicable.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional,

national and international regulations.

Hazardous ingredients: amides, coco, ethoxylated

3-iodo-2-propynyl butylcarbamate (IPBC)

2-octyl-2h-isothiazol-3-one (OIT)

C(M)IT/MIT (3:1)

Supplemental label

elements

: Not applicable.

: Not applicable.

Additional information

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous

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

articles

Special packaging requirements

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

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
amides, coco, ethoxylated	EC: 500-211-2 CAS: 68425-44-5	<3	Eye Dam. 1, H318	-	[1]
3-iodo-2-propynyl butylcarbamate (IPBC)	EC: 259-627-5 CAS: 55406-53-6 Index: 616-212-00-7	≤0.16	Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372	ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 0.5 mg/l M [Acute] = 10	[1]

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SECTION 3: Composition/information on ingredients

			3		
			Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Chronic] = 1	
bronopol	REACH #: 01-2119980938-15 EC: 200-143-0 CAS: 52-51-7 Index: 603-085-00-8	≤0.1	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 2, H411	ATE [Oral] = 500 mg/kg ATE [Dermal] = 1100 mg/kg M [Acute] = 10	[1]
2-octyl-2h-isothiazol-3-one (OIT)	EC: 247-761-7 CAS: 26530-20-1 Index: 613-112-00-5	≤0.02	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 100 mg/kg ATE [Dermal] = 690 mg/kg ATE [Inhalation (dusts and mists)] = 0.05 mg/l Skin Sens. 1, H317: C ≥ 0.0015% M [Acute] = 100 M [Chronic] = 100	[1]
C(M)IT/MIT (3:1)	REACH #: 01-2120764691-48 CAS: 55965-84-9 Index: 613-167-00-5	≤0.0024	Acute Tox. 3, H301 Acute Tox. 2, H310 Acute Tox. 2, H330 Skin Corr. 1B, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 53 mg/kg ATE [Dermal] = 50 mg/kg ATE [Inhalation (vapours)] = 0.5 mg/l Skin Corr. 1B, H314: $C \ge 0.6\%$ Skin Irrit. 2, H315: $0.06\% \le C < 0.6\%$ Eye Dam. 1, H318: $C \ge 0.6\%$ Eye Irrit. 2, H319: $0.06\% \le C < 0.6\%$ Skin Sens. 1, H317: $C \ge 0.0015\%$ M [Acute] = 100 M [Chronic] = 100	[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.

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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: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

Inhalation: Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Ingestion: If swallowed, seek medical advice immediately and show the container or label.

Keep person warm and at rest. Do NOT induce vomiting.

Protection of first-aiders : No action shall be taken involving any personal risk or without suitable training. It

may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear

gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

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.

Unsuitable extinguishing

media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

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

Hazardous combustion

products

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

5.3 Advice for firefighters

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SECTION 5: Firefighting measures

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

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 ingest. Avoid breathing vapour or mist. Avoid release to the environment. 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.

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 container tightly closed.

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.

See Technical Data Sheet / packaging for further information.

7.3 Specific end use(s)

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SECTION 7: Handling and storage

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

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

Product/ingredient name	Type	Exposure	Value	Population	Effects
3-iodo-2-propynyl butylcarbamate (IPBC)	DNEL	Long term Inhalation	0.023 mg/ m³	Workers	Systemic
,	DNEL	Short term Inhalation	0.07 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	1.16 mg/m³	Workers	Local
	DNEL	Long term Inhalation	1.16 mg/m³	Workers	Local
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
bronopol	DNEL	Short term Dermal	0.004 mg/ cm ²	General population	Local
	DNEL	Long term Dermal	0.004 mg/ cm ²	General population	Local
	DNEL	Short term Dermal	0.008 mg/ cm ²	Workers	Local
	DNEL	Long term Dermal	0.008 mg/ cm ²	Workers	Local
	DNEL	Long term Oral	0.18 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Oral	0.5 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.6 mg/m ³	General population	Local
	DNEL	Long term Inhalation	0.6 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.7 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	1.8 mg/m³	General population	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	2.1 mg/kg bw/day	General population	Systemic
	DNEL	Short term	2.5 mg/m ³	Workers	Local

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SECTION 8: Exposure controls/personal protection

		Inhalation			
	DNEL	Long term	2.5 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Long term	3.5 mg/m ³	Workers	Systemic
		Inhalation			
	DNEL	Short term Dermal	6 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Short term	10.5 mg/m ³	Workers	Systemic
		Inhalation			
C(M)IT/MIT (3:1)	DNEL	Long term	0.02 mg/m ³		Local
		Inhalation		population	
	DNEL	Long term	0.02 mg/m ³	Workers	Local
		Inhalation			
	DNEL	Short term	0.04 mg/m ³		Local
	5.151	Inhalation	0.04 / 2	population	
	DNEL	Short term	0.04 mg/m ³	Workers	Local
	DAIEI	Inhalation	0.00	0 1	0 1 .
	DNEL	Long term Oral	0.09 mg/	General	Systemic
	חאבו	Ob 4 4 O 1	kg bw/day	population	0
	DNEL	Short term Oral	0.11 mg/	General	Systemic
			kg bw/day	population	

PNECs

No PNECs available

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.

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

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SECTION 8: Exposure controls/personal protection

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

May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm)

Recommended, gloves(breakthrough time) > 8 hours: neoprene (> 0.35 mm), PVC (> 0.5 mm), nitrile rubber (> $0.4 \, \text{mm}$)

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

: Do not allow to enter drains or watercourses.

controls

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 Red.

Odour Characteristic. [Slight]

Not applicable. **Odour threshold**

Melting point/freezing point

Initial boiling point and

boiling range

: Lowest known value: 100°C (212°F) (water).

Flammability : Not applicable.

Lower and upper explosion

limit

: Not applicable.

Flash point : Not applicable. **Auto-ignition temperature** Not available. **Decomposition temperature** : Not available.

pН : 7.5 to 9

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

Solubility in water : Not available. Partition coefficient: n-octanol/ : Not available.

water

: Highest known value: 3.2 kPa (23.8 mm Hg) (at 20°C) (water). Weighted Vapour pressure

average: 3.03 kPa (22.73 mm Hg) (at 20°C)

: 0.36 (water) compared with butyl acetate **Evaporation rate**

Density : 1.217 g/cm³ Vapour density : Not available. : Not available. **Explosive properties** Oxidising properties Not available.

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SECTION 9: Physical and chemical properties

Particle characteristics

Median particle size : Not applicable.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

- 10.1 Reactivity
- : No specific test data related to reactivity available for this product or its ingredients.
- 10.2 Chemical stability
- : Stable under recommended storage and handling conditions (see Section 7).
- 10.3 Possibility of hazardous reactions
- : Under normal conditions of storage and use, hazardous reactions will not occur.
- 10.4 Conditions to avoid
- : When exposed to high temperatures may produce hazardous decomposition products.
- 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
- : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

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
3-iodo-2-propynyl butylcarbamate (IPBC)	LD50 Oral	Rat	1470 mg/kg	-
2-octyl-2h-isothiazol-3-one (OIT)	LD50 Dermal	Rabbit	690 mg/kg	-
	LD50 Dermal	Rabbit	690 mg/kg	-
	LD50 Oral	Rat	550 mg/kg	-
C(M)IT/MIT (3:1)	LD50 Oral	Rat	53 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)
JOTUN Multicolor Solvent-Free RE	N/A	N/A	N/A	N/A	497.0
3-iodo-2-propynyl butylcarbamate (IPBC)	500	N/A	N/A	N/A	0.5
bronopol	500	1100	N/A	N/A	N/A
2-octyl-2h-isothiazol-3-one (OIT)	100	690	N/A	N/A	0.05
C(M)IT/MIT (3:1)	53	50	N/A	0.5	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
amides, coco, ethoxylated	Eyes - Irritant	Mammal - species	-	-	-
3-iodo-2-propynyl	Eyes - Irritant	unspecified Mammal -	_	_	
butylcarbamate (IPBC)	Lyes - Imani	species unspecified	-		-
bronopol	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Rabbit	-	24 hours 500	-

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SECTION 11: Toxicological information

				milligrams	
	Skin - Moderate irritant	Human	-	10 milligrams	-
	Skin - Moderate irritant	Rabbit	-	80 milligrams	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
3-iodo-2-propynyl butylcarbamate (IPBC)	skin	Mammal - species unspecified	Sensitising
2-octyl-2h-isothiazol-3-one (OIT)	skin	Mammal - species unspecified	Sensitising
C(M)IT/MIT (3:1)	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 : 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)

Product/ingredient name	Category	Route of exposure	Target organs
bronopol	Category 3	-	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
3-iodo-2-propynyl butylcarbamate (IPBC)	Category 1	-	trachea

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

Product/ingredient name	Result	Species	Exposure
3-iodo-2-propynyl butylcarbamate (IPBC)	Acute EC50 0.022 mg/l	Algae - Scenedesmus subspicatus	72 hours
, ,	Acute EC50 0.16 mg/l	Crustaceans - Daphnia magna	48 hours
	Acute LC50 0.067 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 70 ppb Fresh water	Fish - Oncorhynchus mykiss - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
bronopol	Acute EC50 0.18 ppm Marine water	Algae - Skeletonema costatum	96 hours

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SECTION 12: Ecological information

	Acute EC50 1.6 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 11.17 ppm Fresh water	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 1.94 ppm	Fish - Oncorhynchus mykiss	49 days
2-octyl-2h-isothiazol-3-one	Acute EC50 0.084 mg/l	Algae - Scenedesmus	72 hours
(OIT)	_	subspicatus	
	Acute EC50 0.32 mg/l	Daphnia	48 hours
	Acute LC50 0.047 mg/l	Fish	96 hours
C(M)IT/MIT (3:1)	Acute EC50 0.048 mg/l	Algae - Pseudokirchneriella	72 hours
		subcapitata	
	Acute EC50 0.0052 mg/l	Algae - Skeletonema costatum	48 hours
	Acute EC50 0.1 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.22 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute NOEC 0.00064 mg/l	Algae - Skeletonema costatum	48 hours
	Chronic NOEC 0.0012 mg/l	Algae - Pseudokirchneriella	72 hours
		subcapitata	
	Chronic NOEC 0.004 mg/l	Daphnia - Daphnia magna	21 days
	Chronic NOEC 0.098 mg/l	Fish - Oncorhynchus mykiss	28 days

Conclusion/Summary

: This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
3-iodo-2-propynyl butylcarbamate (IPBC)	-	-	Readily
C(M)IT/MIT (3:1)	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
bronopol	0.18	-	low
2-octyl-2h-isothiazol-3-one (OIT)	2.45	-	low
C(M)IT/MIT (3:1)	-	3.16	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 Endocrine disrupting properties

Not available.

12.7 Other adverse effects

No known significant effects or critical hazards.

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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

Disposal considerations

The classification of the product may meet the criteria for a hazardous waste.

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.

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.

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	IATA
14.1 UN number or ID number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-
14.4 Packing group	-	-	-	-
14.5 Environmental hazards	No.	No.	No.	No.

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.

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SECTION 14: Transport information

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

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

Other EU regulations

VOC for Ready-for-Use

Mixture

VOC

: Not available. : Not applicable.

Industrial emissions (integrated pollution

prevention and control) -

Industrial emissions

: Not listed

: Not listed

(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 is not controlled under the Seveso Directive.

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.

Norway

Product registration : Under declaration

number

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

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SECTION 15: Regulatory information

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.

15.2 Chemical safety

assessment

: No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement

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
Skin Sens. 1, H317	Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H310	Fatal in contact with skin.
H311	Toxic in contact with skin.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H335	May cause respiratory irritation.
H372	Causes damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.
EUH071	Corrosive to the respiratory tract.

Full text of classifications [CLP/GHS]

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SECTION 16: Other information

Acute Tox. 2 **ACUTE TOXICITY - Category 2** Acute Tox. 3 **ACUTE TOXICITY - Category 3 ACUTE TOXICITY - Category 4** Acute Tox. 4 Aquatic Acute 1 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1 Aquatic Chronic 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1 Aquatic Chronic 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2 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 Skin Corr. 1 SKIN CORROSION/IRRITATION - Category 1 Skin Corr. 1B SKIN CORROSION/IRRITATION - Category 1B Skin Irrit. 2 SKIN CORROSION/IRRITATION - Category 2 Skin Sens. 1 SKIN SENSITISATION - Category 1 Skin Sens. 1A SKIN SENSITISATION - Category 1A STOT RE 1 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1 STOT SE 3 SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 22.03.2023 Date of issue/ Date of : 22.03.2023

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.

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