

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

1.1 Product identifier	
Product name	: JOTUN Multicolor Solvent-Free FS
Product code	: 52456
Product description	: Colouring material. Paint.
Product type	: Liquid.
Other means of identification	: Not available.

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

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]

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

Date of issue/Date of revision

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.
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.
Storage	: Not applicable.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Hazardous ingredients	: Betaines, C12-14-alkyldimethyl 2-octyl-2h-isothiazol-3-one (OIT) C(M)IT/MIT (3:1)
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	<u>ents</u>
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	1			1
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре
Betaines, C12-14-alkyldimethyl	REACH #: 01-2119529251-48 EC: 266-368-1 CAS: 66455-29-6	<3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Aquatic Chronic 3, H412	-	[1]
3-iodo-2-propynyl butylcarbamate (IPBC)	CAS: 55406-53-6 Index: 616-212-00-7	<0.1	Acute Tox. 4, H302 Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT RE 1, H372 (trachea) Aquatic Acute 1, H400 Aquatic Chronic 1, H410	ATE [Oral] = 500 mg/kg ATE [Inhalation (dusts and mists)] = 0.5 mg/l M [Acute] = 10 M [Chronic] = 1	[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)	CAS: 26530-20-1 Index: 613-112-00-5	≤0.023	Acute Tox. 3, H301 Acute Tox. 3, H311 Acute Tox. 2, H330 Skin Corr. 1, H314 Eye Dam. 1, H318 Skin Sens. 1A, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410 EUH071	ATE [Oral] = 125 mg/kg ATE [Dermal] = 311 mg/kg ATE [Inhalation (dusts and mists)] = 0.27 mg/l Skin Sens. 1, H317: C $\geq 0.0015\%$ 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	<0.0015	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 \geq 0.6% Skin Irrit. 2, H315: 0.06% \leq C < 0.6% Eye Dam. 1, H318: C \geq 0.6% Eye Irrit. 2, H319: 0.06% \leq C < 0.6% Skin Sens. 1, H317: C \geq 0.0015% M [Acute] = 100 M [Chronic] = 100	

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JOTUN Multicolor Solvent-Free FS					
SECTION 3: Composition/information on ingredients					
		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.

Type

[1] Substance classified with a health or environmental hazard

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

SECTION 4: First aid measures

4.1 Description of fi	rst aid measures
Comorel	In all assass of

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	1	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	1	If swallowed, seek medical advice immediately and show the container or label. Keep person warm and at rest. Do NOT induce vomiting.
Protection of first-aiders	:	No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

If splashed in the eyes, the liquid may cause irritation and reversible damage. 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 2-octyl-2h-isothiazol-3-one (OIT), C(M)IT/MIT (3:1). May produce an allergic reaction.

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 ir	nmediate medical attention and special treatment needed
Notes to physician	 Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
Specific treatments	: No specific treatment.

SECTION 4: First aid measures

See toxicological information (Section 11)

SECTION 5: Firefighting measures

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5.1 Extinguishing media		
Suitable extinguishing media	Recommended: alcohol-resistant foam, CO ₂ , powders, water spray.	
Unsuitable extinguishing media	Do not use water jet.	
5.2 Special hazards arising fi	m 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		
Special protective actions for fire-fighters	 Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. 	0
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	1	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

Avoid contact with skin and eyes. Avoid inhalation of vapour, spray or mist.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

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

Additional information on storage conditions

Store in a dry, cool and well-ventilated area. Keep container tightly closed.

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)	
Recommendations	: Not available.
Industrial sector specific solutions	: Not available.

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	Туре	Exposure	Value	Population	Effects
Betaines, C12-14-alkyldimethyl	DMEL	Long term Dermal	0.03 mg/ cm ²	General population	Local
	DMEL	Long term Dermal	0.06 mg/ cm²	Workers	Local
	DNEL	Long term Oral	83.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83.3 µg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.145 mg/ m ³	General population	Systemic
	DNEL	Long term Dermal	0.233 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.822 mg/ m ³	Workers	Systemic
	DMEL	Long term Inhalation	0.87 mg/m ³	General population	Local
	DMEL	Long term Inhalation	3.53 mg/m ³		Local
3-iodo-2-propynyl butylcarbamate (IPBC)	DNEL	Long term Inhalation	0.023 mg/ m³	Workers	Systemic
	DNEL	Short term	0.07 mg/m ³	Workers	Systemic

Date of issue/Date of revision

: No previous validation

ECTION 8: Exposure controls/personal protection							
		Inhalation					
	DNEL	Short term Inhalation	1.16 mg/m ³	Workers	Local		
	DNEL	Long term Inhalation	1.16 mg/m³	Workers	Local		
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic		
pronopol	DNEL	Short term Oral	0.5 mg/kg bw/day	General population	Systemic		
	DNEL	Short term Inhalation	1.8 mg/m ³	General population	Systemic		
	DNEL	Short term Dermal	2.1 mg/kg bw/day	General population	Systemic		
	DNEL	Short term Dermal	6 mg/kg bw/day	Workers	Systemic		
	DNEL	Short term Inhalation	10.5 mg/m ³	Workers	Systemic		
	DNEL	Short term Dermal	4 µg/cm²	General population	Local		
	DNEL	Long term Dermal	4 µg/cm²	General population	Local		
	DNEL	Short term Dermal	8 µg/cm²	Workers	Local		
	DNEL	Long term Dermal	8 µg/cm²	Workers	Local		
	DNEL	Long term Oral	0.18 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/m³	General population	Systemic		
	DNEL	Long term Dermal	0.7 mg/kg bw/day	General	Systemic		
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic		
	DNEL	Short term Inhalation	2.5 mg/m ³	Workers	Local		
	DNEL	Long term Inhalation	2.5 mg/m ³	Workers	Local		
	DNEL	Long term Inhalation	3.5 mg/m³	Workers	Systemic		
	DNEL	Long term Inhalation	0.6 mg/m³	General population	Local		
C(M)IT/MIT (3:1)	DNEL	Long term Inhalation	0.02 mg/m ³	General population	Local		
	DNEL	Long term Inhalation	0.02 mg/m ³	Workers	Local		
	DNEL	Short term Inhalation	0.04 mg/m ³	General population	Local		
	DNEL	Short term Inhalation	0.04 mg/m ³	Workers	Local		
	DNEL	Long term Oral	0.09 mg/ kg bw/day	General population	Systemic		
	DNEL	Short term Oral	0.11 mg/ kg bw/day	General population	Systemic		

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.

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SECTION 8: Exposure controls/personal protection

Individual protection mea	asures
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

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	: Not applicable.
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 this product contains ingredients with exposure limits, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits. By spraying : particulate filter (FFP2 / N95). In confined spaces, use compressed-air or fresh-air respiratory equipment.
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	: Violet.Violet.
Odour	: Characteristic.
Odour threshold	: Not applicable.
Melting point/freezing point	: 0
Initial boiling point and boiling range	: Not available.
Flammability	: Not applicable.

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SECTION 9: Physical and chemical properties

Lower and upper explosion limit	1	Not applicable.
Flash point	1	Closed cup: 100°C
Auto-ignition temperature	1	Not applicable.
Decomposition temperature	4	Not available.
рН	4	7 to 9
Viscosity	4	Kinematic (40°C): >20.5 mm ² /s
Solubility in water	:	cold waterEasily solublehot waterEasily soluble
Partition coefficient: n-octanol/ water	:	Not available.
Vapour pressure	:	Not available.
Evaporation rate	:	Not available.
Density	1	1.25 to 1.45 g/cm ³
Vapour density	1	Not available.
Explosive properties	4	Not available.
Oxidising properties	4	Not available.
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	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 hazard classes as defined in Regulation (EC) No 1272/2008

There are no data available on the mixture itself. The product is not classified as hazardous according to Regulation (EC) 1272/2008 as amended.

If splashed in the eyes, the liquid may cause irritation and reversible damage. 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 2-octyl-2h-isothiazol-3-one (OIT), C(M)IT/MIT (3:1). May produce an allergic reaction. Acute toxicity

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
Betaines, C12-14-alkyldimethyl	LD50 Dermal	Rat	>2000 mg/kg	-
	LD50 Oral	Rat	3203 mg/kg	-
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)
Betaines, C12-14-alkyldimethyl	3203	N/A	N/A	N/A	N/A
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)	125	311	N/A	N/A	0.27
C(M)IT/MIT (3:1)	53	50	N/A	0.5	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Betaines,	Eyes - Irritant	Mammal -	-	-	-
C12-14-alkyldimethyl		species			
	.	unspecified			
	Skin - Mild irritant	Mammal -	-	-	-
		species			
		unspecified			
3-iodo-2-propynyl	Eyes - Irritant	Mammal -	-	-	-
butylcarbamate (IPBC)		species			
		unspecified			
bronopol	Eyes - Irritant	Mammal -	-	-	-
		species			
	.	unspecified			
	Skin - Mild irritant	Mammal -	-	-	-
		species			
		unspecified			
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				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
Č(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.

SECTION 11: Toxicological information

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)

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

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	
3-iodo-2-propynyl	Acute EC50 0.022 mg/l	Algae - Scenedesmus	72 hours	
butylcarbamate (IPBC)		subspicatus		
,	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 -	96 hours	
		Juvenile (Fledgling, Hatchling,		
		Weanling)		
bronopol	Acute EC50 0.18 ppm Marine water	Algae - Škeletonema costatum	96 hours	
	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	
ate of issue/Date of revision	: 06.12.2023 Date of previous issue	: No previous validation Version	:1 11/	

SECTION 12: Ecological information

	Chronic NOEC 0.004 mg/l Chronic NOEC 0.098 mg/l	subcapitata Daphnia - Daphnia magna Fish - Oncorhynchus mykiss	21 days 28 days
Conclusion/Summary	: This material is harmful to aquatic life with long lasting effects.		

: 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
Betaines, C12-14-alkyldimethyl	-0.4	-	low
bronopol 2-octyl-2h-isothiazol-3-one (OIT)	0.18 2.45	-	low 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.

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 method Product	ds
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.

SECTION 13: Disposal considerations

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	
P	ackaging		
	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.	
the relevant waste authority on the classification of empty Empty containers must be scrapped or reconditioned. Dispose of containers contaminated by the product in acco		 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	
S	pecial precautions	: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.	

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1 UN number or ID number	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.

: Not available. 14.7 Maritime transport in bulk according to IMO instruments

SECTION 15: Regulatory information

15.1 Safety, health and envir	onmental regulations/legislation specific for the substance or mixture
EU Regulation (EC) No. 190	<u>7/2006 (REACH)</u>
	nces subject to authorisation
Annex XIV	
None of the components a	are listed.
Substances of very high	
None of the components a	are listed.
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	: Not applicable.
Other EU regulations	
VOC	: Not available.
VOC for Ready-for-Use Mixture	: Not applicable.
Industrial emissions (integrated pollution prevention and control) - Air	: Not listed
Industrial emissions (integrated pollution prevention and control) - Water	: Not listed
Ozone depleting substance Not listed.	es (1005/2009/EU)
Prior Informed Consent (P Not listed.	<u>IC) (649/2012/EU)</u>
Persistent Organic Polluta Not listed.	<u>ints</u>
	d 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.
International regulations	
Chemical Weapon Convent Not listed.	ion List Schedules I, II & III Chemicals
Montreal Protocol Not listed.	
Stockholm Convention on F Not listed.	Persistent Organic Pollutants
Rotterdam Convention on F Not listed.	Prior Informed Consent (PIC)
UNECE Aarhus Protocol on	POPs and Heavy Metals

SECTION 15: Regulatory information

Not listed.

15.2 Chemical safety assessment

: Not applicable.

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]

Acute Tox. 2	ACUTE TOXICITY - Category 2	
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 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	

SECTION 16: Other information

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
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Version	: 1
Notice to reader	

Notice to reader

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