

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

1.1 Product identifier	
Product name	: Jotapipe IL 6002 60S
UFI	: MTG0-E0K1-C004-JNDD
Product code	: 38482
Product type	: Powder coating.
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

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

Product definition : Mixture Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS] Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F Aquatic Chronic 2, H411 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 Hazard statements
- : Danger.
- ements : H3⁻
- : H317 May cause an allergic skin reaction. H318 - Causes serious eye damage. H360F - May damage fertility.
 - H411 Toxic to aquatic life with long lasting effects.

SECTION 2: Hazards identification

Pro estatione en estatemente		
Precautionary statements		
General	Not applicable.	
Prevention	 P201 - Obtain special instructions before use. P280 - Wear protective gloves, protective clothing, eye protection, face protection or hearing protection. P273 - Avoid release to the environment. P261 - Avoid breathing dust. 	ion,
Response	 P391 - Collect spillage. P308 + P313 - IF exposed or concerned: Get medical advice or attention. 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, P310 - IF IN EYES: Rinse cautiously with water for sever minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. 	ral
Storage	Not applicable.	
Disposal	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.	,
Hazardous ingredients	epoxy resin (MW ≤ 700) calcium oxide bisphenol a	
Supplemental label elements	EUH205 - Contains epoxy constituents. May produce an allergic reaction. EUH212 - Warning! Hazardous respirable dust may be formed when used. Do breathe dust.	not
Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles	Restricted to professional users.	
Special packaging requirem	<u>its</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 vPvB.	or a
Other hazards which do not result in classification	May cause endocrine disruption.	
The mixture may be a skin se	itiser. It may also be a skin irritant and repeated contact may increase this effect	•

SECTION 3: Composition/information on ingredients

3.2 Mixtures

: Mixture

SECTION 3: Composition/information on ingredients						
Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Туре	
titanium dioxide	EC: 236-675-5 CAS: 13463-67-7 Index: 022-006-00-2	≤5	Carc. 2, H351 (inhalation)	-	[1] [2] [*]	
epoxy resin (MW ≤ 700)	REACH #: 01-2119456619-26 EC: 216-823-5 CAS: 1675-54-3 Index: 603-073-00-2	≤3	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1B, H317 Aquatic Chronic 2, H411	Skin Irrit. 2, H315: C ≥ 5% Eye Irrit. 2, H319: C ≥ 5%	[1]	
calcium oxide	EC: 215-138-9 CAS: 1305-78-8	≤2.6	Skin Irrit. 2, H315 Eye Dam. 1, H318 STOT SE 3, H335	-	[1] [2]	
bisphenol a	EC: 201-245-8 CAS: 80-05-7 Index: 604-030-00-0	<2.5	Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360F STOT SE 3, H335 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 10	[1] [2] [3]	
dicyandiamide	EC: 207-312-8 CAS: 461-58-5	≤3	Not classified. See Section 16 for the full text of the H statements declared above.	-	[2]	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Туре

[1] Substance classified with a health or environmental hazard

[2] Substance with a workplace exposure limit

[3] Substance of equivalent concern

[*] The classification as a carcinogen by inhalation applies only to mixtures placed on the market in powder form containing 1% or more of titanium dioxide particles with aerodynamic diameter $\leq 10 \ \mu$ m not bound within a matrix. This mixture contains $\geq 1\%$ of titanium dioxide. The Annex VI classification of titanium dioxide does not apply to this mixture according to Note 10.

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

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.	
Date of issue/Date of revision	: 11.09.2023 Date of previous issue : 01.09.2023 Version : 2.01 3/16	;

SECTION 4: First aid measures

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.

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. Coating powders can cause localised skin irritation in folds of the skin or under tight clothing.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains epoxy resin (MW ≤ 700), 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Over-exposure signs/symptoms

Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: Adverse symptoms may include the following: reduced foetal weight increase in foetal deaths skeletal malformations
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur reduced foetal weight increase in foetal deaths skeletal malformations
Ingestion	: Adverse symptoms may include the following: stomach pains reduced foetal weight increase in foetal deaths skeletal malformations
4.3 Indication of any imm	ediate 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, CO_2 blanket, water spray or mist.
Unsuitable extinguishing media	:	Do not use water jet. Do not use inert gas under high pressure (e.g. CO2).
5.2 Special hazards arising f	ron	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.
		Fine dust clouds may form explosive mixtures with air.
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, pro	te	ctive equipment and emergency procedures
For non-emergency personnel	:	Exclude sources of ignition and ventilate the area. Avoid breathing dust. 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 an electrically protected vacuum cleaner or by wet- brushing and place in container for disposal according to local regulations (see section 13). Do not use a dry brush as dust clouds or static can be created.
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).

Advice should be taken from a competent occupational health practitioner on the assessment of employees with skin or respiratory complaints before the individual is exposed to the uncured product.

7.1 Precautions for safe handling

Precautions should be taken to prevent the formation of dusts in concentrations above flammable, explosive or occupational exposure limits.

Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources.

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.

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).

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.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

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.

Seveso Directive - Reporting thresholds

Danger criteria

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

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

Dust Limit : 10 mg/m³ (TWA of total inhalable dust) and 4 mg/m³ (TWA of respirable)

Product/ingredient name	Exposure limit values
titanium dioxide	FOR-2011-12-06-1358 (Norway, 6/2021).
	TWA: 5 mg/m ³ 8 hours.
calcium oxide	FOR-2011-12-06-1358 (Norway, 6/2021).
	STEL: 4 mg/m ³ 15 minutes. Form: Respirable dust
	FOR-2011-12-06-1358 (Norway, 6/2021). Notes: indicative limit
	value
	TWA: 1 mg/m ³ 8 hours. Form: Respirable dust
bisphenol a	FOR-2011-12-06-1358 (Norway, 6/2021). Skin sensitiser.
	Reproductive toxin. Notes: indicative limit value
	TWA: 2 mg/m ³ 8 hours. Form: inhalable
dicyandiamide	FOR-2011-12-06-1358 (Norway, 6/2021). [Cyanides] Absorbed
-	through skin.
	TWA: 5 mg/m ³ , (calculated as CN) 8 hours.

SECTION 8: Exposure controls/personal protection

Recommended monitoring procedures : 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
epoxy resin (MW ≤ 700)	DNEL	Long term Dermal	89.3 µg/kg	General	Systemic
			bw/day	population	
	DNEL	Long term Oral	0.5 mg/kg	General	Systemic
	DNEL	Long term Dermal	bw/day 0.75 mg/	population Workers	Systemic
	DINEL	Long term Derma	kg bw/day	Workers	
	DNEL	Long term Inhalation	0.87 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	4.93 mg/m ³	Workers	Systemic
calcium oxide	DNEL	Long term	1 mg/m³	General	Local
		Inhalation		population	
	DNEL	Long term Inhalation	1 mg/m³	Workers	Local
	DNEL	Short term	4 mg/m³	General	Local
		Inhalation	4	population	
	DNEL	Short term Inhalation	4 mg/m³	Workers	Local
bisphenol a	DNEL	Short term Dermal	0.0019 mg/	General	Systemic
	DIVLL	Chort term Derma	kg bw/day	population	Oysternie
	DNEL	Long term Dermal	0.0019 mg/	General	Systemic
		5	kg bw/day	population	5
	DNEL	Short term Oral	0.004 mg/	General	Systemic
			kg bw/day	population	
	DNEL	Long term Oral	0.004 mg/	General	Systemic
			kg bw/day	population	0
	DNEL	Short term Dermal	0.031 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	0.031 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Short term	1 mg/m³	General	Local
		Inhalation		population	
	DNEL	Long term	1 mg/m³	General	Local
	DNEL	Inhalation Short term	1 mg/m³	population General	Systemic
		Inhalation	i ing/in	population	Cysternic
	DNEL	Short term	2 mg/m³	Workers	Local
		Inhalation			
	DNEL	Long term	2 mg/m³	Workers	Local
		Inhalation			
	DNEL	Short term	2 mg/m³	Workers	Systemic
		Inhalation	2 mg/m^3	Workors	Svetomie
	DNEL	Long term Inhalation	2 mg/m³	Workers	Systemic
	DNEL	Long term	1 mg/m³	General	Systemic
		Inhalation		population	
				1 1	

PNECs

ECTION 8: Exposure controls/personal protection					
Product/ingredient name	Compartment Detail	Value	Method Detail		
epoxy resin (MW ≤ 700)	Fresh water Marine Sewage Treatment Plant	0.006 mg/l 0.0006 mg/l 10 mg/l			
	Fresh water sediment Marine water sediment Soil	0.996 mg/l 0.0996 mg/l 0.196 mg/l	-		

8.2 Exposure controls	
Appropriate engineering controls	: Avoid breathing dust. 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 exposure to dusts below the OEL, suitable respiratory protection must be worn.
Individual protection measu	<u>res</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.

The breakthrough time must be greater than the end use time of the product.

The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.

Gloves should be replaced regularly and if there is any sign of damage to the glove material.

Always ensure that gloves are free from defects and that they are stored and used correctly.

The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.

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

Gloves

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

Recommended, gloves(breakthrough time) > 8 hours: neoprene (> 0.35 mm), PVC (> 0.5 mm), nitrile rubber (> 0.75 mm), butyl rubber (> 0.4 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	pro	rsonnel should wear protective clothing. Care should be taken in the selection of otective clothing to ensure that inflammation and irritation of the skin at the neck d wrists through contact with the powder are avoided.
Other skin protection	sel	propriate footwear and any additional skin protection measures should be lected based on the task being performed and the risks involved and should be proved by a specialist before handling this product.

SECTION 8: Exposure controls/personal protection

Respiratory protection	r	If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. (FFP2 / N95).
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	:	Solid. Powder.	
Colour	:	Various.	
Odour	:	Odourless.	
Odour threshold	:	Not applicable.	
Melting point (dust)	:	85 - 115 °C	
Initial boiling point and boiling range	:	Not applicable.	
Lower explosion limit (dust)	:	30 g/m³ (EN 140)34-3)
Minimum ignition energy (mJ)	:	10 - 30 (EN 138	21)
Flash point	:	Not applicable.	
Auto-ignition temperature	:	> 400°C	
Decomposition temperature	;	>250°C	
рН	;	Not applicable.	
Viscosity	:	Not applicable.	
Solubility in water	:	cold water hot water	Not soluble Not soluble
Partition coefficient: n-octanol/ water	1	Not applicable.	
Vapour pressure	:	Not applicable.	
Evaporation rate	:	Not applicable.	
Density	:	1.33 to 1.43 g/cr	n³
Vapour density	:	Not applicable.	
Explosive properties	:	Not available.	
Oxidising properties	:	Not available.	
Particle characteristics			
Median particle size	:	Not available.	

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity **10.1 Reactivity** : Fine dust clouds may form explosive mixtures with air. : Stable under recommended storage and handling conditions (see Section 7). 10.2 Chemical stability **10.3 Possibility of** : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions 10.4 Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Take precautionary measures against electrostatic discharges.

SECTION 10: Stability and reactivity

To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

10.5 Incompatible materials	:	Not applicable.
10.6 Hazardous decomposition products	1	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 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.

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. Coating powders can cause localised skin irritation in folds of the skin or under tight clothing.

Based on the properties of the epoxy constituent(s) and considering toxicological data on similar mixtures, this mixture may be a skin sensitiser and an irritant. It contains low molecular weight epoxy constituents which are irritating to eyes, mucous membrane and skin. Repeated skin contact may lead to irritation and to sensitisation, possibly with cross-sensitisation to other epoxies. Skin contact with the mixture and exposure to spray mist and vapour should be avoided.

Contains epoxy resin (MW ≤ 700), 4,4'-isopropylidenediphenol. May produce an allergic reaction.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal LD50 Oral	Rabbit Mouse	20 g/kg 15600 mg/kg	-

Acute toxicity estimates

N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
calcium oxide	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
bisphenol a	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Eyes - Severe irritant	Rabbit	-	24 hours 250 Micrograms	-
	Skin - Mild irritant	Rabbit	-	250 milligrams	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 milligrams	-

Sensitisation

SECTION 11: Toxicological information

Product/ingredient name	Route of exposure	Species	Result			
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising			
bisphenol a	skin	Mammal - species unspecified	Sensitising			

Mutagenicity

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

Developmental effects

Fertility effects

: May damage fertility.

Teratogenicity

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
calcium oxide	Category 3	-	Respiratory tract irritation
bisphenol a	Category 3	-	Respiratory tract irritation

: No known significant effects or critical hazards.

Specific target organ toxicity (repeated exposure)

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

Aspiration hazard

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

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

May cause endocrine disruption.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

There are no data available on the mixture itself.

Coating powder residues should not be allowed to enter drains or watercourses or be deposited where they could affect ground or surface waters.

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	
titanium dioxide	Acute LC50 3 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours	
	Acute LC50 6.5 mg/l Fresh water	Daphnia - Daphnia pulex - Neonate	48 hours	
	Acute LC50 >1000000 μg/l Marine water	Fish - Fundulus heteroclitus	96 hours	
epoxy resin (MW ≤ 700)	Acute EC50 1.4 mg/l	Daphnia	48 hours	
	Acute LC50 3.1 mg/l	Fish - pimephales promelas	96 hours	
	Chronic NOEC 0.3 mg/l	Fish	21 days	
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SECTION 12: Ecological information

oisphenol a	Acute EC50 1.506 mg/l	Algae - Prorocentrum minimum	72 hours
		- Exponential growth phase	
	Acute EC50 1000 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 7.75 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 1.34 mg/l Marine water	Crustaceans - Americamysis bahia - Larvae	48 hours
	Acute LC50 3.5 mg/l Marine water	Fish - Rivulus marmoratus - Embryo	96 hours
	Chronic NOEC 2 mg/l Fresh water	Algae - Chlorolobion braunii - Exponential growth phase	4 days
	Chronic NOEC 0.05 mg/l Fresh water	Crustaceans - Asellus aquaticus - Juvenile (Fledgling, Hatchling, Weanling)	21 days
	Chronic NOEC 30 µg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
	Chronic NOEC 0.2 µg/l Fresh water	Fish - Carassius auratus - Adult	90 days

Conclusion/Summary

: This material is 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
epoxy resin (MW ≤ 700)	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
epoxy resin (MW ≤ 700)	2.64 to 3.78	31	low
calcium oxide	-	2.34	low
bisphenol a	3.4	20 to 67	low

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

May cause endocrine disruption.

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

SECTION 13: Disposal considerations

Methods of disposal	The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times co vith the requirements of environmental protection and waste disposal legisla ny regional local authority requirements. Dispose of surplus and non-recycl roducts via a licensed waste disposal contractor. Waste should not be disp ntreated to the sewer unless fully compliant with the requirements of all aut vith jurisdiction.	omply ition and lable posed of
Hazardous waste	/es.	
Disposal considerations	Do not allow to enter drains or watercourses. Dispose of according to all federal, state and local applicable regulations. This product is mixed with other wastes, the original waste product code ma onger apply and the appropriate code should be assigned. For further information, contact your local waste authority.	ay no

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	packaging sl	ion of waste should be avoided or minimised wherever possible. Waste hould be recycled. Incineration or landfill should only be considered ng 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		I 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
UN3077	UN3077	UN3077	UN3077
Environmentally hazardous substance, solid, n.o.s. (bisphenol a)	Environmentally hazardous substance, solid, n.o.s. (bisphenol a)	Environmentally hazardous substance, solid, n.o.s. (bisphenol a). Marine pollutant (epoxy resin (MW ≤ 700), bisphenol a)	Environmentally hazardous substance, solid, n.o.s. (bisphenol a)
9	9	9	9
	111	111	111
	UN3077 Environmentally hazardous substance, solid, n.o.s. (bisphenol a) 9 9	UN3077 UN3077 Environmentally hazardous substance, solid, n.o.s. (bisphenol a) Environmentally hazardous substance, solid, n.o.s. (bisphenol a) 9 9	UN3077UN3077UN3077Environmentally hazardous substance, solid, n.o.s. (bisphenol a)Environmentally hazardous substance, solid, n.o.s. (bisphenol a)Environmentally hazardous substance, solid, n.o.s. (bisphenol a). Marine pollutant (epoxy resin (MW < 700), bisphenol a)999 $\overbrace{1}^{1}$ $\overbrace{2}^{1}$ $\overbrace{2}^{1}$ 9 $\overbrace{1}^{1}$ $\overbrace{2}^{1}$ 9 $\overbrace{1}^{1}$ $\overbrace{2}^{1}$ 9 $\overbrace{2}^{1}$ $\overbrace{2}^{1}$

SECTION 14: Tr	ransp	or	t inform	ation			
	Yes.	<u> </u>		Yes.		Yes.	 Yes.
Additional information	<u>on</u>			1		I	1
ADR/RID		:	or ≤5 kg, pr and 4.1.1.4	ovided the pactor to 4.1.1.8.	kagings n		nsported in sizes of ≤5 L ns of 4.1.1.1, 4.1.1.2
ADN		:	This product is not regulated as a dangerous good when transported in sizes of ≤ 5 or ≤ 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8.				
IMDG		:	This product is not regulated as a dangerous good when transported in sizes of \leq 5 or \leq 5 kg, provided the packagings meet the general provisions of 4.1.1.1, 4.1.1.2 and 4.1.1.4 to 4.1.1.8. Emergency schedules F-A, S-F				
ΙΑΤΑ		:	This product is not regulated as a dangerous good when transported in sizes of \leq 5 L or \leq 5 kg, provided the packagings meet the general provisions of 5.0.2.4.1, 5.0.2.6.1.1 and 5.0.2.8.				
14.6 Special precaution user	ons 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 transpo bulk according to IMC instruments		:	Not availab	le.			

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture <u>EU Regulation (EC) No. 1907/2006 (REACH)</u>

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Toxic to reproduction	bisphenol a	Candidate	-	-
Endocrine disrupting properties for human health	bisphenol a	Recommended	ED/01/2018	01.10.2019
Endocrine disrupting properties for environment	bisphenol a	Recommended	ED/01/2018	01.10.2019

Annex XVII - Restrictions : Restricted to professional users. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles Other EU regulations

VOO

voc

: The provisions of Directive 2004/42/EC on VOC apply to this product. Refer to the product label and/or technical data sheet for further information.

SECTION 15: Regulatory information

VOC for Ready-for-Use Mixture	1	Not available.
Industrial emissions (integrated pollution prevention and control) - Air	:	Listed
Industrial emissions (integrated pollution prevention and control) - Water	:	Listed
Ozone depleting substance Not listed.	<u>es</u>	<u>(1005/2009/EU)</u>
Prior Informed Consent (PI	<u>C)</u>	<u>(649/2012/EU)</u>

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.

Product/ingredient name	List name	Name on list	Classification	Notes
	Norway Occupational Exposure Limits	Bisfenol A inhalerbar	Repro. R	-

<u>Norway</u>

Product registration : Under declaration number

International regulations

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

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC) Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals Not listed.

15.2 Chemical safety : Not applicable.

assessment

Date of issue/Date of revision

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and	: ATE = Acute Toxicity Estimate
acronyms	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 Repr. 1B, H360F	Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H360F	May damage fertility.
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.

Full text of classifications [CLP/GHS]

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
Carc. 2	CARCINOGENICITY - Category 2
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3
Date of printing	: 11.09.2023
Data of incurs/ Data of	. 11.00.2022

Date of issue/ Date of revision	: 11.09.2023
Date of previous issue	: 01.09.2023
Version	: 2.01

Notice to reader

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