

Safety Data Sheet according to Regulation (EC) No. 2020/878

SECTION 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1	Product Identifier Product Name:	NC07 THERMO-LAG 3000-P PART A	Revision Date: Supercedes Date: Version Number:	02/04/2024 05/03/2024 5			
	UFI Code: Contain nanoform:	TNK0-40C8-F00E-DPRF No					
1.2	Relevant identified uses of the substance or mixture and uses advised against	Fireproofing material.	Base component of 2 components coating - Industrial use. Fireproofing material. Advised against: others than recommended				
	Product to be mixed with: Mixing ratio by volume Part A/ Part B:	THERMO-LAG 3000-P PART B 1:1					
1.3	Details of the supplier of the safety	/ data sheet					
	Manufacturer:	Carboline Norge AS Postboks 593 3412 Lierstranda Norway Regulatory / Technical Information: +47 32 85 73 00 +47 32 85 74 00					
	Datasheet Produced by:	Tarka, Malgorzata - hms@carboline.com					
1.4	Emergency telephone number:	CHEMTREC +1 703 5273887 (Outside US 112 (24/7) Croatia +3851 2348 342 (24/7 in Croatian Iceland 112 (24/7) Malta 112 (24/7)					

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Classification according to Classification, Labeling & Packaging Regulation (EC) 1272/2008

EU Other	EUH205
EU Other	EUH211
Skin Irrit. 2	H315
Skin Sens. 1	H317
Eye Irrit. 2	H319
Acute Tox. 4 Inhalation	H332
Carc. 2	H351
Repr. 2	H361f
STOT RE 2	H373
Aquatic Chronic 2	H411

2.2 Label elements

Symbol(s) of Product



Signal Word

Warning

Named Chemicals on Label

melamine, 2-butoxyethanol, 2,2-bis-[4-(2,3-epoxipropoxi)phenyl]propane, Diphosphoric acid, compound with 1,3,5-triazine-2,4,6-triamine (1:2), Trimethylolpropane triacrylate

HAZARD STATEMENTS

EU Other	EUH205	Contains epoxy constituents. May produce an allergic reaction.
EU Other	EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.
Skin Irrit. 2	H315	Causes skin irritation.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Eye Irrit. 2	H319	Causes serious eye irritation.
Acute Tox. 4 Inhalation	H332	Harmful if inhaled.
Carc. 2	H351	Suspected of causing cancer.
Repr. 2	H361f	Suspected of damaging fertility.
STOT RE 2	H373	May cause damage to organs through prolonged or repeated exposure.
Aquatic Chronic 2	H411	Toxic to aquatic life with long lasting effects.
PRECAUTION PHRASES		
	P202	Do not handle until all safety precautions have been read and understood.
	P260	Do not breathe dust/fume/gas/mist/vapours/spray.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection/ face protection.
	P284	Wear respiratory protection.
	P302+352	IF ON SKIN: Wash with plenty of soap and water.

P304+340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P333+313	If skin irritation or rash occurs: Get medical advice/attention.
P391	Collect spillage.
P501	Dispose of contents/container to waste treatment/disposal facility in accordance with local, state, and federal
	regulations.

2.3 Other hazards

No Information

Results of PBT and vPvB assessment:

The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

Endocrine disrupting properties - Toxicity

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

Endocrine disrupting properties - Ecotoxicity

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

SECTION 3: Composition/Information On Ingredients

3.1 Substances

Not applicable

3.2 Mixtures

Hazardous ingredients

Name According to EEC EINECS No.	<u>%</u>	Classifications	SCL Value ATE Value	
CAS-No. REACH Reg No. Index NUmber			M-Factor	
2,2-bis-[4-(2,3-epoxipropoxi) phenyl]propane 216-823-5	25 - <50	H315-317-319-411 Aquatic Chronic 2, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1	SCL:	H319≥5 H315≥5
1675-54-3				
01-2119456619-26			ATE:	-
603-073-00-2			M-Factor: (acute)	
			M-Factor: (chronic)	

[1	1
pentaerythritol 204-104-9	10 - <25		SCL:	-
115-77-5				
01-2119473985-20			ATE:	_
-				
			M-Factor: (acute)	
			M-Factor: (chronic)	
Diphosphoric acid, compound with 1,3,5-triazine-2,4,6-triamine (1:2) 236-860-0	10 - <25	H332 Acute Tox. 4 Inhalation	SCL:	-
13518-93-9				
01-2120784880-43			ATE:	-
-				
			M-Factor: (acute)	
			M-Factor: (chronic)	
melamine 203-615-4	10 - <25	H351-361F-373 Carc. 2, Repr. 2, STOT RE 2	SCL:	-
108-78-1				
01-2119485947-16			ATC.	
-			ATE:	-
			M-Factor: (acute)	
			M-Factor: (chronic)	

titanium dioxide 236-675-5	2.5 - <10		SCL:	-
13463-67-7				
01-2119489379-17 -			ATE:	-
			M-Factor: (acute)	
			M-Factor: (chronic)	
Trimethylolpropane triacrylate 239-701-3	2.5 - <10	H315-317-319-400-410 Aquatic Acute 1, Aquatic Chronic 1, Eye Irrit. 2, Skin Irrit. 2, Skin Sens. 1	SCL:	-
15625-89-5				
01-2119489896-11			ATE:	-
607-111-00-9				
			M-Factor: (acute)	
			M-Factor: (chronic)	
aluminium oxide 215-691-6	2.5 - <10		SCL:	-
1344-28-1				
01-2119529248-35			ATE:	-
-				
			M-Factor: (acute)	
			M-Factor: (chronic)	

carbon 231-153-3	1.0 - <2.5		SCL:	-
7440-44-0				
-			ATE:	-
-				
			M-Factor: (acute)	
			M-Factor: (chronic)	
2-butoxyethanol 203-905-0	0.1 - <1.0	H302-315-319-331 Acute Tox. 3 Inhalation, Acute Tox. 4	SCL:	-
111-76-2		Oral, Eye Irrit. 2, Skin Irrit. 2		
01-2119475108-36			ATE:	1200 mg/kg (oral); 3 mg/L
603-014-00-0				(inh.); >2000 mg/kg (derm.)
			M-Factor: (acute)	
			M-Factor: (chronic)	

Remarks:

CAS No 13463-67-7: Note 10

Additional Information: The text for CLP Hazard Statements shown above (if any) is given in Section 16.

SECTION 4: First-aid Measures

4.1 Description of First Aid Measures

GENERAL NOTES: Show this safety data sheet to the doctor in attendance.

AFTER INHALATION: Move to fresh air. Give oxygen or artificial respiration if needed. When risk of unconsciousness, place and transport the victim in secured recovery position. Provide fresh air, rest and warmth. Call a physician immediately.

AFTER SKIN CONTACT: Use a mild soap if available. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. If skin irritation persists, call a physician. Do not use solvent or thinners to clean skin.

AFTER EYE CONTACT: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses. If eye irritation persists, consult a specialist.

AFTER INGESTION: Do not induce vomiting. Get immediate medical attention. Never give anything by mouth to an unconscious person. If vomiting occurs spontaneously: Keep head below hips to prevent aspiration of stomach vomit into lungs. Provide fresh air, rest and warmth.

Self protection of the first aider:

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

May damage fertility or the unborn child. Harmful by inhalation. May cause sensitization by skin contact. Danger of serious damage to health by prolonged exposure. Irritating to eyes and skin. Contains substance which can cause cancer.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

When symptoms persist or in all cases of doubt seek medical advice.

SECTION 5: Firefighting Measures

5.1 Extinguishing Media:

Carbon Dioxide, Dry Chemical, Foam

FOR SAFETY REASONS NOT TO BE USED: Alcohol, Alcohol based solutions, any other media not listed above. Do not use a solid water stream as it may scatter and spread fire.

5.2 Special hazards arising from the substance or mixture

Heating or fire conditions liberates toxic gas. As the product contains combustible organic components, fire will produce dense black smoke containing hazardous products of combustion (see section 10).

5.3 Advice for firefighters

In the event of fire, wear self-contained breathing apparatus. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Keep containers and surroundings cool with water spray.

SECTION 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel

Ensure adequate ventilation. Use personal protective equipment. Remove all sources of ignition.

6.1.2 For emergency responders

See Section 7, 8 and 10 for further information.

6.2 Environmental precautions

Do not allow material to contaminate ground water system. Prevent product from entering drains. Local authorities should be advised if significant spillages cannot be contained.

6.3 Methods and material for containment and cleaning up

Do not let product enter drains. Prevent further leakage or spillage if safe to do so. Contain spillage, soak up with noncombustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).

6.4 Reference to other sections

Please refer to EU disposal requirements or country specific disposal requirements for this material. See Section 8 and 13 for further information.

SECTION 7: Handling and Storage

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. Electrical equipment should be protected to the appropriate standard. Use only in area provided with appropriate exhaust ventilation. Wear personal protective equipment. Do not breathe vapours or spray mist. Use only explosion-proof equipment. Persons with a history of skin sensitisation problems or asthma, allergies, chronic or recurrent

respiratory disease should not be employed in any process in which this preparation is being used. Apply technical measures to comply with the occupational exposure limits (see section 8). People handling polyurethane or epoxy products must have received special training according to guidelines from the National Occupational Health and Safety Board. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke.

7.2 Conditions for safe storage, including any incompatibilities

CONDITIONS TO AVOID: Avoid heat, sparks, flames and other ignition sources. **STORAGE CONDITIONS:** Store in original container. Keep locked up or in an area accessible only to qualified or authorised persons. Keep container closed. Store in a dry, well ventilated place away from sources of heat, ignition and direct sunlight. Store in upright position only.

7.3 Specific end use(s)

The mixing and application to be in accordance with the technical data sheets.

SECTION 8: Exposure Controls/Personal Protection

8.1 Control parameters

Ingredients with Occupational Exposure Limits

(EU)

Name	CAS-No.	LTEL ppm	STEL ppm	STEL mg/m3	LTEL mg/m3
2,2-bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3				
pentaerythritol	115-77-5				
Diphosphoric acid, compound with 1,3,5- triazine-2,4,6-triamine (1:2)	13518-93-9				
melamine	108-78-1				
titanium dioxide	13463-67-7				
Trimethylolpropane triacrylate	15625-89-5				
aluminium oxide	1344-28-1				
carbon	7440-44-0				
2-butoxyethanol	111-76-2	20	50	246	98
Name	<u>CAS-No.</u>	OEL Note			
2,2-bis-[4-(2,3-epoxipropoxi)phenyl]propane	1675-54-3				
pentaerythritol	115-77-5				
Diphosphoric acid, compound with 1,3,5- triazine-2,4,6-triamine (1:2)	13518-93-9				
melamine	108-78-1				
titanium dioxide	13463-67-7				
Trimethylolpropane triacrylate	15625-89-5				
aluminium oxide	1344-28-1				
carbon	7440-44-0				
2-butoxyethanol	111-76-2	Can be absorbe	ed through the ski	n.	

FURTHER ADVICE: Refer to the regulatory exposure limits for the workforce enforced in each country. Some components may not have been classified under the EU CLP Regulation. Annotations: Carc = Capable of causing cancer and/or heritable genetic damage, Sen = Capable of causing occupational asthma, Sk = Can be absorbed through the skin.

2,2-bis-[4-(2,3-epoxipropoxi)phenyl]propane

EC No.:	CAS-No.:
216-823-5	1675-54-3

DNELs - Derived no effect level

	Workers					Cons	sumers	
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required				0.75 mg/kg		0.75 mg/kg bw/	
Inhalation		12.25 mg/m3		12.25 mg/m3		bw/day		day
Dermal		8.33 mg/kg		8.33 mg/kg bw/		3.571 mg/kg		3.571 mg/kg bw/
		bw/day		day		bw/day		day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.006 mg/L
Fresh water sediments	0.996 mg/kg
Marine water	0.0006 mg/L
Marine sediments	0.0996 mg/kg
Food chain	
Microorganisms in sewage treatment	10 mg/L
soil (agricultural)	0.196 mg/kg
Air	

Chemical Name:

pentaerythritol	
EC No.:	CAS-No.:
204-104-9	115-77-5

DNELs - Derived no effect level

	Workers					Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects	
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic	
Oral	Not required				1 mg/kg bw/d		0.5 mg/kg bw/d		
Inhalation		7 mg/m3		3.5 mg/m3		1.75 mg/m3	-	0.9 mg/m3	
Dermal		2 mg/kg bw/d		1 mg/kg bw/d		1 mg/kg bw/d		0.5 mg/kg bw/d	

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1 mg/l
Fresh water sediments	
Marine water	0.1 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

Diphosphoric acid, compound with 1,3,5-triazine-2,4,6-triamine (1:2)

EC No.:	CAS-No.:
236-860-0	13518-93-9

DNELs - Derived no effect level

	Workers				Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						1.23 mg/kg	
Inhalation	· · · · · · · · · · · · · · · · · · ·		24.25 mg/m3				4.27 mg/m3	
Dermal				3.44 mg/kg				1.23 mg/kg

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1.8 mg/L
Fresh water sediments	6.69 mg/kg
Marine water	0.18 mg/L
Marine sediments	0.669 mg/kg
Food chain	
Microorganisms in sewage treatment	10 g/L
soil (agricultural)	0.282 mg/kg
Air	

Chemical Name:

melamine

EC No.:	CAS-No.:
203-615-4	108-78-1

DNELs - Derived no effect level

		We	orkers		Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral		Not	required					0.42 mg/kg bw/
Inhalation		21 mg/m3		8.3 mg/m3				day
Dermal		31.6 mg/kg	_	11.8 mg/kg bw/	_			1.5 mg/m3
		bw/day		day				4.2 mg/kg bw/
								day

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	1.8 mg/l
Fresh water sediments	1.94 mg/kg
Marine water	0.18 mg/l
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	0.57 mg/kg
Air	

titanium dioxide

EC No.:	CAS-No.:
236-675-5	13463-67-7

DNELs - Derived no effect level

	Workers				Consumers			
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						10 mg/m ³	700 mg/kg/ bw/
Inhalation			10 mg/m ³		-			day
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	0.127 mg/L
Fresh water sediments	1000 mg/kg dw
Marine water	1 mg/L
Marine sediments	100 mg/kg dw
Food chain	1667 mg/kg (oral)
Microorganisms in sewage treatment	100 mg/kg
soil (agricultural)	100 mg/kg dw
Air	

Chemical Name:

aluminium oxide	
EC No.:	CAS-No.:
215-691-6	1344-28-1

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required						3.29 mg/kg bw/	
Inhalation	15.63 mg/m ³ 15.63 mg/m ³						day	
Dermal								

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	
Fresh water sediments	
Marine water	
Marine sediments	
Food chain	
Microorganisms in sewage treatment	
soil (agricultural)	
Air	

2-butoxyethanol	
EC No.:	
203-905-0	

DNELs - Derived no effect level

	Workers			Consumers				
Route of	Acute effect	Acute effects	Chronic	Chronic effects	Acute effect	Acute effects	Chronic	Chronic effects
Exposure	local	systemic	effects local	systemic	local	systemic	effects local	systemic
Oral	Not required			123 mg/m3	13.4 mg/kg		3.2 mg/kg	
Inhalation	246 mg/m3 1091 mg/m3 98 mg/m3				426 mg/m3		49 mg/m3	
Dermal	89 mg/kg 75 mg/kg				44.5 mg/kg		38 mg/kg	

CAS-No.: 111-76-2

PNEC's - Predicted no effect concentration

Environmental protection target	PNEC
Fresh water	8.8 mg/L
Fresh water sediments	34.6 mg/kg
Marine water	0.88 mg/L
Marine sediments	3.46 mg/kg
Food chain	
Microorganisms in sewage treatment	463 mg/L
soil (agricultural)	2.33 mg/kg
Air	

8.2 Exposure controls

Personal Protection

RESPIRATORY PROTECTION: Wear a battery powered assisted air-fed mask during spraying operations and long-term exposure. When working in confined or poorly ventilated spaces, a battery powered assisted air-fed mask must be used. When painting small areas, or when using a roller or brush, respiratory protection with combination filter (dust and gas filter, EN 14387:2004+A1:2008) may be used: Gas filter type A2 (organic substances). Dust filter P3 (for fine dust).

EYE PROTECTION: If splashes are likely to occur, wear: Face-shield, tightly fitting safety goggles (EN 166).

HAND PROTECTION: Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact). Be aware that in daily use the durability of a chemical resistant protective glove can be notably shorter than the break through time measured according to EN 374, due to the numerous outside influences (e.g. temperature). Use chemical resistant gloves and lotions and barrier creams to prevent drying of the skin. Protective gloves complying with EN 374: Butyl rubber. Nitril rubber. Recommended glove material for mixed product: Protective gloves complying with EN 374: Butyl rubber. Nitril rubber. Thickness >= 0,5 mm; breakthrough time >=480 min.

BODY PROTECTION: Long sleeved clothing.

Melting point / freezing point (°C)

Remove and wash contaminated clothing before re-use.

OTHER PROTECTIVE EQUIPMENT: Ensure that eyewash stations and safety showers are close to the workstation location.

ENGINEERING CONTROLS: Ensure adequate ventilation, especially in confined areas.

SE	SECTION 9: Physical and Chemical Properties					
9.1	1 Information on basic physical and chemical properties Colour Viscous grey liquid					
	Physical State	Liquid				
	Odor	Characteristic				
	Odor threshold	Not determined				

pН

Not determined

Not determined

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Boiling point or initial boiling point and boiling range (°C)	94 - 316				
Flash Point, (°C)	85				
Evaporation rate	Not determined				
Flammability (solid, gas)	Not determined				
Lower and upper explosive limit	Not determined				
Vapour Pressure	Not determined				
Relative vapour density	>1 (air = 1)				
Density and/or relative density	1.20 - 1.43				
Solubility in / Miscibility with water	Insoluble				
Partition coefficient: n-octanol/water	Not determined				
Auto-ignition temperature (°C)	Not determined				
Decomposition temperature (°C)	Not determined				
Kinematic viscosity	100,000 - 360,000 cP				
Particle characteristics	Not applicable to liquids				
Other information					
VOC Content g/I:	13				
Grams of VOC per liter of coating product as applied per ISO 11890-1 and/or ISO 11890-2.					
Specific Gravity (g/cm3)	1.45				

SECTION 10: Stability and Reactivity

10.1 Reactivity

9.2

No reactivity hazards known under normal storage and use conditions.

10.2 Chemical stability

Stable under normal conditions.

10.3 Possibility of hazardous reactions No reactivity hazards known under normal storage and use conditions.

10.4 Conditions to avoid

Avoid heat, sparks, flames and other ignition sources.

10.5 Incompatible materials

Keep away from strong oxidising agents and strongly acid or alkaline materials.

10.6 Hazardous decomposition products

In case of fire or hot work operations, hazardous decomposition products may be formed such as: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), aliphatic amines, aldehydes.

SECTION 11: Toxicological information

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

Acute Toxicity:

Oral LD50:

No information available on the product itself as the product is not tested.

Inhalation LC50: Dermal LD50:	No information available on the product itself as the product is not tested. No information available on the product itself as the product is not tested.
Irritation:	Irritating to eyes and skin.
Corrosivity:	No information available.
Sensitization:	May cause an allergic skin reaction.
Repeated dose toxicity:	No information available.
Carcinogenicity:	Suspected of causing cancer.
Mutagenicity:	No information available.
Toxicity for reproduction:	This product contains one or more substances classified as toxic for reproduction.
STOT-single exposure:	No information available.
STOT-repeated exposure:	No information available.
Aspiration hazard:	No information available.

If no information is available above under Acute Toxicity then the acute effects of this product have not been tested. Data on individual components are tabulated below:

CAS-No.	Name According to EEC	Oral LD50	Dermal LD50	Vapor LC50	<u>Gas LC50</u>	Dust/Mist LC50
1675-54-3	2,2-bis-[4-(2,3-epoxipropoxi) phenyl]propane	>2000 mg/kg (oral-rat)	>2000 mg/kg (dermal-rabbit)	No information	No information	No information
115-77-5	pentaerythritol	25500 mg/kg (rat)	>10000 mg/kg (rabbit)	No information	No information	No information
13518-93-9	Diphosphoric acid, compound with 1,3,5-triazine-2,4,6- triamine (1:2)	>2000 mg/kg (oral, rat)	>2000 mg/kg (dermal, rat)	No information	No information	3.81 mg/L (4h, rat)
13463-67-7	titanium dioxide	>5000 mg/kg (oral-rat)	10000 mg/kg	No information	No information	>6.82 mg/L (inh- rat-4h)
15625-89-5	Trimethylolpropane triacrylate	5190 mg/kg (Rat)	5170 mg/kg (Rabbit)	No information	No Information	No Information
1344-28-1	aluminium oxide	15900 mg/kg bw, rat, OECD Guideline 401 (Acute Oral Toxicity)	No information	No information	No information	No information
111-76-2	2-butoxyethanol	1200 mg/kg bw	>2000 mg/kg (dermal, rabbit)	3 mg/L	No information	No information

Additional Information:

Chronic exposure causes drying effect on the skin and eczema. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. Repeated skin contact leads to irritation and to sensitisation, possible with cross-sensitisation to other epoxies. This product may contain Titanium Dioxide, which is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals. This classification is relevant when exposed to titanium dioxide in dust or powder form only, including cured product that is subject to sanding, grinding, cutting, or other surface preparation activities. Chronic exposure has been associated with various neurotoxic effects including permanent brain damage. The product is irritating to the eyes and may cause sensitisation to the respiratory system. Swallowing concentrated chemical may cause severe internal injury. Inhalation of vapour or mist can cause headache, nausea, irritation of nose, throat, and lungs.

11.2 Information on other hazards

Endocrine disrupting properties - Toxicity

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

SECTION 12: Ecological Information

12.1 Toxicity:

	EC50 48hr (Daphnia): IC50 72hr (Algae): LC50 96hr (fish):	No information No information No information
12.2	Persistence and degradability:	No information
12.3	Bioaccumulative potential:	No information
12.4	Mobility in soil:	No information
12.5	Results of PBT and vPvB assessment:	The product does not meet the criteria for PBT/vPvB in accordance with Annex XIII.

12.6 Endocrine disrupting properties

Endocrine disrupting properties - Ecotoxicity

Based on the available data, the product does not contain substances identified as having endocrine disrupting properties according to Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 in concentration of 0,1% or higher.

12.7 Other	adverse effects:	No information				
CAS-No.	Name According to EEC	<u>EC50 48hr</u>	<u>IC50 72hr</u>	<u>LC50 96hr</u>		
1675-54-3	2,2-bis-[4-(2,3-epoxipropoxi)phenyl]prop	pane 2.7 mg/L (Daphnia magna)	9.4 mg/L (EC50, Selenastrum capricornutum))	1.5 mg/L (Oncorhynchus mykiss)		
115-77-5	pentaerythritol	No information	>100 mg/l (EC50,72h , Desmodesmus subspicatus)	>100 mg/l (LC50,96h, Oryzias latipes)		
13463-67-7	titanium dioxide	>100 mg/l (EC50, 48h, Daphnia magna OECD202)	16 mg/l (EC50, 72h, Pseudokirchnerella subcapitata)	>100 mg/l (EC50, 96h, Oncorhynchus Mykiss OECD203)		
111-76-2	2-butoxyethanol	1550 mg/L (Daphnia magna)	1840 mg/L (Pseudokirchneriella subcapitata, ErC50, 72h)	1474 mg/L (Oncorhynchus mykiss)		

SECTION 13: Disposal Considerations

13.1 WASTE TREATMENT METHODS: Do not burn, or use a cutting torch on, the empty drum. According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Empty containers should be taken to an approved waste handling site for recycling or disposal. Dispose of waste material at an approved (hazardous) waste treatment/disposal facility in accordance with applicable local state, and federal regulations. Do not dispose of waste with normal garbage, or to sewer systems.

European Waste Code:	08 01 11*
Packaging Waste Code:	15 01 10*

SECTION 14: Transport Information

		ADR/RID	ADN	IMDG	ΙΑΤΑ
14.1	UN-number or ID number	UN3082	UN3082	UN3082	UN3082
14.2	UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin)	ENVIRONMENTAL LY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Bisphenol A epoxy resin)
14.3	Transport Hazard Class(es)	9	9	9	9
14.4	Packing Group	111	111	Ш	111
14.5	Enviromental Hazards	Marine pollutant: Yes (Bisphenol A epoxy resin)	Marine pollutant: Yes (Bisphenol A epoxy resin)	Marine pollutant: Yes (Bisphenol A epoxy resin)	Marine pollutant: Yes (Bisphenol A epoxy resin)

14.6	Special precautions for user	No Information
	EmS-No.:	F-A, S-F
14.7	Maritime transport in bulk according to IMO instruments	No Information

SECTION 15: Regulatory Information

^{15.1} Safety, health and environmental regulations/legislation for the substance or mixture:

National Regulations:

Denmark Product Registration Number:	Not available
Danish MAL Code:	Not available

Danish MAL Code - Mixture:	Not available
Sweden Product Registration Number:	Not available
Norway Product Registration Number:	Not available
WGK Class:	3
Covered by Directive 2012/18/EC (Seveso III):	E2
Restrictions to product or to substances according to Annex XVII, Regulation (CE) 1907/2006:	Entry 3

Annex XIV - Annex XIV, Regulation (CE) 1907/2006 - Authorisation List:

CAS-No. Name According to EEC

Not Applicable

SVHC - Substances of very high concern (Candidate List - Art. 59 REACH):

CAS-No. Name According to EEC

108-78-1 melamine

15.2 Chemical Safety Assessment:

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other Information

Text for CLP Hazard Statements shown in Section 3 describing each ingredient:

	0 0
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H351	Suspected of causing cancer.
H361f	Suspected of damaging fertility.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Reasons for revision

Changes have been made to Section 2 of the Safety Data Sheet (SDS). Please refer to the Hazard Identification information in Section 2 of this SDS. Changes have been made to Section 3 of the Safety Data Sheet (SDS). Please refer to the Composition / Information on Ingredients in Section 3 of this SDS. Changes have been made to Section 11 of the Safety Data Sheet (SDS). Please refer to the Toxicological Information in Section 11 of this SDS. Changes have been made to Section 15 of the Safety Data Sheet (SDS). Please refer to the Regulatory Information in Section 15 of this SDS.

List of References

This Safety Data Sheet was compiled with data and information from the following sources:

- The Ariel Regulatory Database provided by the 3E Corporation in Copenhagen, Denmark

Date Printed: 02/04/2024

- Joint Research Centre in Ispra, Italy
- Regulation (EC) 1272/2008 with subsequent amendments
- Regulation (EC) 1907/2006 with subsequent amendments
- Commission Regulation (EU) 2020/878
- Eu Council Decision 2000/532/EC and its Annex entitled "List of Wastes"
- Safety Data Sheet from raw material supplier
- The classification declared in sec. 2.2 is based on the calculation methods set out in Annex I and Annex II of the CLP Reg. 1272/2008 on the composition of the formula.

Acronym & Abbreviation Key

CLP	Classification, Labeling & Packaging Regulation
EC	European Commission
EU	European Union
US	United States
CAS	Chemical Abstract Service
EINECS	European Inventory of Existing Chemical Substances
REACH	Registration, Evaluation, Authorization of Chemicals Regulation
GHS	Globally Harmonized System of Classification and Labeling of Chemicals
LTEL	Long term exposure limit
STEL	Short term exposure limit
OEL	Occupational exposure limit
mqq	Parts per million
mg/m3	Milligrams per cubic meter
TLV	Threshold Limit Value
ACGIH	American Conference of Governmental Industrial Hygienists
OSHA	Occupational Safety & Health Administration
PEL	Permissible Exposure Limits
VOC	Volatile organic compounds
g/l	Grams per liter
mg/kg	milligrams per kilogram
N/A	Not applicable
LD50	Lethal dose at 50%
LC50	Lethal concentration at 50%
EC50	Half maximal effective concentration
IC50	Half maximal inhibitory concentration
PBT	Persistent bioaccumulative toxic chemical
vPvB	Very persistent and very bioaccumulative
EEC	European Economic Community
ADR	International Transport of Dangerous Goods by Road
RID	International Transport of Dangerous Goods by Rail
UN	United Nations
IMDG	International Maritime Dangerous Goods Code
IATA	International Air Transport Association
MARPOL	International Convention for the Prevention of Pollution From Ships, 1973 as modified
-	the Protocol of 1978
IBC	International Bulk Container
RTI	Respiratory Tract Irritation
NE	Narcotic Effects
	international Maritime Organization
Note P:	The classification as a carcinogen or mutagen need not apply; the substance contains
	s than 0,1 % w/w benzene
Note 10:	The classification as a carcinogen by inhalation applies only to mixtures in powder
IOI	m containing 1 % or more of titanium dioxide which is in the form of or
	incorporated in particles with aerodynamic diameter \leq 10 µm.

For further information, please contact: Regulatory Department

The information on this sheet corresponds to our present knowledge. It is not a specification and it does not guarantee specific properties. The information is intended to provide general guidance as to health and safety based upon our knowledge of the handling, storage, and use of the product.

It is not applicable to unusual or non-standard uses of the product or where instructions and recommendations are not followed.