

SAFETY DATA SHEET



Cover PE (TGIC) (B009)

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

1.1 Product identifier

Product name : Cover PE (TGIC) (B009)
Product code : 30982
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 BOYA SAN. VE TİC. A.Ş.
Çerkezköy Organize Sanayi Şubesi
G.O.P MAHALLESİ
ULUSOY CAD. NO. 8
CERKEZKOY 59500 TEKIRDAG
TURKEY

Phone: + 90 282 726 8070
Fax: + 90 282 726 8073
sdsjotun@jotun.com

Başvurulacak Kişi: Deren Ercan
deren.metiner@jotun.com

Original preparation date : 02.01.2024

1.4 Emergency telephone number

National Poison Information Center

+90 224 442 82 93 Uludağ Üniversitesi Zehir Danışma Merkezi (www.uludag.edu.tr/uludag/zehir.html)
a. ACİL DURUM TELEFONU: Zehirlenme durumlarında gerektiğinde ulusal zehir merkezinin (UZEM) 114 nolu telefonunu arayınız.
b. ACİL İLK YARDIM MERKEZİ:112
c. İTFAİYE:110

SECTION 2: Hazards identification**2.1 Classification of the substance or mixture****Product definition** : Mixture**Classification according to regulation SEA: RG.-10/12/2020-31330**

Acute Tox. 4, H302

Eye Dam. 1, H318

Skin Sens. 1, H317

Muta. 1B, H340

Repr. 1B, H360

STOT RE 2, H373

Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation SEA: RG.-10/12/2020-31330.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements**Hazard pictograms** :**Signal word** : Danger.

Hazard statements :

H302 - Harmful if swallowed.
 H317 - May cause an allergic skin reaction.
 H318 - Causes serious eye damage.
 H340 - May cause genetic defects.
 H360 - May damage fertility or the unborn child.
 H373 - May cause damage to organs through prolonged or repeated exposure.
 H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements**General** : Not applicable.

Prevention :

P201 - Obtain special instructions before use.
 P280 - Wear protective gloves, protective clothing and eye or face protection.
 P273 - Avoid release to the environment.
 P260 - Do not breathe dust.
 P270 - Do not eat, drink or smoke when using this product.

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 several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 Immediately call a POISON CENTER or doctor.

Storage : Not applicable.

Disposal :

P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients :

1,3,5-tris(oxiranymethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione
 Reaction mass of bis(2,3-epoxypropyl) terephthalate (CAS 7195-44-0) and tris(oxiranymethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4)
 Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked
 zinc di(benzothiazol-2-yl) disulphide
 N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine
 benzothiazole-2-thiol

Supplemental label elements : Not applicable.

SECTION 2: Hazards identification

Annex 17 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB : This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	SEA: RG.-10/12/2020-31330	Type
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	EC: 219-514-3 CAS: 2451-62-9	<10	Acute Tox. 3, H301 Acute Tox. 3, H331 Eye Dam. 1, H318 Skin Sens. 1, H317 Muta. 1B, H340 STOT RE 2, H373 Aquatic Chronic 3, H412	[1] [2]
Reaction mass of bis(2,3-epoxypropyl)terephthalate (CAS 7195-44-0) and tris(oxiranylmethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4)	-	<10	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Dam. 1, H318 Skin Sens. 1, H317 Repr. 1B, H360 STOT RE 2, H373 (reproductive organs) (oral) Aquatic Chronic 2, H411	[1]
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked	CAS: 127184-53-6	≤3	STOT RE 1, H372 (inhalation)	[1]
zinc di(benzothiazol-2-yl)disulphide	EC: 205-840-3 CAS: 155-04-4	≤3	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	EC: 401-990-0 CAS: 106990-43-6	≤3	Skin Sens. 1, H317 STOT RE 2, H373 (lymphatic system) Aquatic Chronic 2, H411	[1]
titanium dioxide	EC: 236-675-5 CAS: 13463-67-7	≤3	Not classified.	[2]
3,9-bis(2,4-di-tert-butylphenoxy)	EC: 247-952-5 CAS: 26741-53-7	≤1	Aquatic Chronic 1, H410 (M=1)	[1]

SECTION 3: Composition/information on ingredients

-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane				
bismuth tris (2-ethylhexanoate)	CAS: 67874-71-9	≤0.3	Skin Irrit. 2, H315 Eye Dam. 1, H318 Repr. 2, H361d	[1]
zinc	EC: 231-175-3 CAS: 7440-66-6	≤0.3	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
2-ethylhexanoic acid	KKDİK #: Annex 5 EC: 205-743-6 CAS: 149-57-5	<0.3	Repr. 1B, H360D	[1] [2]
dioctyltin dilaurate	CAS: 3648-18-8	<0.3	Repr. 1B, H360D STOT RE 1, H372 (immune system)	[1] [2]
benzothiazole-2-thiol	EC: 205-736-8 CAS: 149-30-4	≤0.3	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1) See Section 16 for the full text of the H statements declared above.	[1]

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 or vPvBs 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

[2] Substance with a workplace exposure limit

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

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. 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.
- Skin contact** : Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

SECTION 4: First aid measures

- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- 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

Potential acute health effects

- Eye contact** : Causes serious eye damage.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : May cause an allergic skin reaction.
- Ingestion** : Harmful if swallowed.

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 immediate medical attention and special treatment needed

- Notes to physician** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

SECTION 5: Firefighting measures

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : This material is toxic to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.

Fine dust clouds may form explosive mixtures with air.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
nitrogen oxides
sulfur oxides
metal oxide/oxides

5.3 Advice for firefighters

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

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

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. Collect spillage.

6.3 Methods and material for containment and cleaning up

Small spill : Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.

Large spill : Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

See Technical Data Sheet / packaging for further information.

Regulation on the prevention of major industrial accidents and reduction of their effects - Reporting thresholds

Danger criteria

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

7.3 Specific end use(s)

- Recommendations** : Not available.
- Industrial sector specific solutions** : Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

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

Occupational exposure limits

Product/ingredient name	Exposure limit values
<input checked="" type="checkbox"/> 3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6 (1H,3H,5H)-trione	ACGIH TLV (United States, 7/2023). [1,3,5-Triglycidyl-s-triazinetrione] TWA: 0.05 mg/m ³ 8 hours.
titanium dioxide	EU OEL (Europe). TWA: 5 mg/m ³ 8 hours.
2-ethylhexanoic acid	ACGIH TLV (United States, 7/2023). TWA: 5 mg/m ³ 8 hours. Form: Inhalable fraction and vapor
dioctyltin dilaurate	ACGIH TLV (United States, 7/2023). [Tin, organic compounds] Absorbed through skin. TWA: 0.1 mg/m ³ , (as Sn) 8 hours. STEL: 0.2 mg/m ³ , (as Sn) 15 minutes.

SECTION 8: Exposure controls/personal protection

Biological exposure indices

No exposure indices known.

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	Type	Exposure	Value	Population	Effects
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	DMEL	Short term Inhalation	0.002 mg/m ³	General population	Systemic
	DMEL	Long term Inhalation	0.005 mg/m ³	General population	Systemic
	DNEL	Short term Inhalation	0.01 mg/m ³	General population	Local
	DNEL	Short term Dermal	0.016 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	0.04 mg/cm ²	General population	Local
	DNEL	Long term Oral	0.043 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.043 mg/kg bw/day	General population	Systemic
	DMEL	Short term Inhalation	0.052 mg/m ³	Workers	Systemic
	DMEL	Long term Inhalation	0.052 mg/m ³	Workers	Systemic
	DMEL	Short term Oral	0.096 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	0.1 mg/m ³	Workers	Local
	DNEL	Short term Dermal	0.16 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Dermal	0.43 mg/cm ²	Workers	Local
	DNEL	Long term Dermal	0.43 mg/kg bw/day	Workers	Systemic
	Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked	DNEL	Long term Inhalation	0.013 mg/m ³	General population
DNEL		Short term Inhalation	0.065 mg/m ³	General population	Local
DNEL		Long term Inhalation	0.075 mg/m ³	Workers	Local
DNEL		Short term Inhalation	0.375 mg/m ³	Workers	Local
zinc di(benzothiazol-2-yl) disulphide	DNEL	Long term Oral	0.6 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	1 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	1.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	3.3 mg/kg bw/day	Workers	Systemic
	DNEL	Long term	5.9 mg/m ³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	DNEL	Inhalation Long term Oral	0.025 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.16 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	0.176 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	0.25 mg/kg bw/day	General population	Systemic
titanium dioxide	DNEL	Long term Inhalation	0.34 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	28 µg/m ³	General population	Local
	DNEL	Long term Inhalation	170 µg/m ³	Workers	Local
3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane	DNEL	Long term Oral	0.39 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.39 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.68 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.78 mg/kg bw/day	Workers	Systemic
bismuth tris(2-ethylhexanoate)	DNEL	Long term Inhalation	2.75 mg/m ³	Workers	Systemic
	DNEL	Long term Inhalation	0.21 mg/m ³	General population	Systemic
	DNEL	Long term Oral	0.24 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.24 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.48 mg/kg bw/day	Workers	Systemic
2-ethylhexanoic acid	DNEL	Long term Inhalation	0.85 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	2 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.5 mg/m ³	General population	Systemic
dioctyltin dilaurate	DNEL	Long term Inhalation	14 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	0.0005 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.0009 mg/m ³	General population	Systemic
benzothiazole-2-thiol	DNEL	Long term Inhalation	0.0035 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	1.25 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.2 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	8.8 mg/m ³	Workers	Systemic

SECTION 8: Exposure controls/personal protection

	DNEL	Short term Oral	10 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	17.6 mg/m ³	General population	Systemic
	DNEL	Short term Dermal	20 mg/kg bw/day	General population	Systemic
	DNEL	Short term Dermal	40 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	70.4 mg/m ³	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Skin protection

Hand protection

: There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Wear suitable gloves tested to ISO 374-1:2016. Recommended, gloves(breakthrough time) > 8 hours: neoprene (> 0.35 mm), PVC (> 0.5 mm), butyl rubber (> 0.4 mm) May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm), nitrile rubber (> 0.75 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

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

SECTION 8: Exposure controls/personal protection

- 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** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

9.1 Information on basic physical and chemical properties

Appearance

- Physical state** : Solid. Powder.
- Colour** : Various.
- Odour** : Odourless.
- Odour threshold** : Not applicable.
- Melting point (dust)** : 85 - 115 °C
- Initial boiling point and boiling range** : Not applicable.
- Flammability (solid, gas)** : Fine dust clouds may form explosive mixtures with air.
- Lower explosion limit (dust)** : 30 g/m³
- Minimum ignition energy (mJ)** : 10 - 30 (EN 13821)
- Flash point** :
Not applicable.
- Auto-ignition temperature** : > 400°C
- Decomposition temperature** : >230°C
- pH** : Not applicable.
- Viscosity** : Not applicable.
- Solubility(ies)** :

Media	Result
cold water	Not soluble
hot water	Not soluble

- Partition coefficient: n-octanol/ water** : Not applicable.
- Vapour pressure** : Not applicable.
Not applicable.
- Density** : 1.2 to 1.9 g/cm³
- 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.
- 10.2 Chemical stability** : The product is stable.
- 10.3 Possibility of hazardous reactions** : Under normal conditions of storage and use, hazardous reactions will not occur.
- 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.
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** : No specific data.
- 10.6 Hazardous decomposition products** : Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	LD50 Oral	Rat	138 mg/kg	-
zinc di(benzothiazol-2-yl)disulphide	LD50 Oral	Rat	540 mg/kg	-
benzothiazole-2-thiol	LD50 Dermal	Rabbit	>7940 mg/kg	-

Conclusion/Summary : Not available.

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)
Cover PE (TGIC) (B009)	995.3	N/A	N/A	35.8	N/A
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1h,3h,5h)-trione	100	N/A	N/A	3	N/A
Reaction mass of bis(2,3-epoxypropyl)terephthalate (CAS 7195-44-0) and tris(oxiranylmethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4)	500	N/A	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	Eyes - Irritant	Mammal - species unspecified	-	-	-
	Eyes - Severe irritant	Rabbit	-	100 milligrams	-
titanium dioxide	Skin - Mild irritant	Human	-	72 hours	-
	Skin - Severe irritant	Rabbit	-	0.5 Grams	-
3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane					
zinc	Skin - Mild irritant	Human	-	72 hours 300 Micrograms	-
2-ethylhexanoic acid	Eyes - Severe irritant	Rabbit	-	20 milligrams	-
	Skin - Mild irritant	Rabbit	-	450	-

SECTION 11: Toxicological information

				milligrams	
--	--	--	--	------------	--

Conclusion/Summary : Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	skin	Mammal - species unspecified	Sensitising
zinc di(benzothiazol-2-yl)disulphide	skin	Mammal - species unspecified	Sensitising
N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	skin	Mammal - species unspecified	Sensitising
benzothiazole-2-thiol	skin	Mammal - species unspecified	Sensitising

Conclusion/Summary : Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione	Category 2	-	-
Reaction mass of bis(2,3-epoxypropyl) terephthalate (CAS 7195-44-0) and tris(oxiranylmethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4)	Category 2	oral	reproductive organs
Cyclohexane, 5-isocyanato-1-(isocyanatomethyl)-1,3,3-trimethyl-, homopolymer, caprolactam-blocked	Category 1	inhalation	-
N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	Category 2	-	lymphatic system
dioctyltin dilaurate	Category 1	-	immune system

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : Harmful if swallowed.

SECTION 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics

- 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

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary : Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Carcinogenicity : No known significant effects or critical hazards.

Mutagenicity : May cause genetic defects.

Reproductive toxicity : May damage fertility or the unborn child.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
zinc di(benzothiazol-2-yl) disulphide	Acute EC50 0.71 mg/l	Daphnia	48 hours
	Acute LC50 0.73 mg/l	Fish	96 hours
titanium dioxide	Chronic NOEC 0.041 mg/l	Fish	89 days
	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

SECTION 12: Ecological information

3,9-bis(2,4-di-tert-butylphenoxy)-2,4,8,10-tetraoxa-3,9-diphosphaspiro[5.5]undecane	Acute LC50 >1000000 µg/l Marine water	Fish - Fundulus heteroclitus	96 hours
	Acute EC10 15.4 mg/l	Algae	72 hours
zinc	Acute EC50 97 mg/l	Algae	72 hours
	Acute LC50 70.7 mg/l	Fish	96 hours
	Chronic NOEC 0.1 mg/l	Daphnia	21 days
	Acute LC50 330 µg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.78 mg/l Fresh water	Fish	96 hours
	Acute EC50 230 µg/l Fresh water	Algae - Pseudokirchneriella subcapitata	96 hours
benzothiazole-2-thiol	Acute EC50 4.19 mg/l Fresh water	Crustaceans - Ceriodaphnia dubia - Neonate	48 hours
	Acute EC50 2.9 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 0.73 mg/l Fresh water	Fish - Oncorhynchus mykiss	96 hours

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
zinc	-	-	Not readily
benzothiazole-2-thiol	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione	-0.8	-	low
zinc di(benzothiazol-2-yl)disulphide	5.02	<8	low
N,N',N'',N'''-tetrakis(4,6-bis(butyl-(N-methyl-2,2,6,6-tetramethylpiperidin-4-yl)amino)triazin-2-yl)-4,7-diazadecane-1,10-diamine	-0.94	-	low
2-ethylhexanoic acid	2.7	-	low
dioctyltin dilaurate	-	<100	low
benzothiazole-2-thiol	2.42	18.35	low

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : 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 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Hazardous waste : Yes.

Waste list









Waste code	Waste code definition
08 01 11*	Waste paint and varnish containing organic solvents or other dangerous substances

Packaging

Methods of disposal : The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

Special precautions : This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spill material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN3077	UN3077	UN3077	UN3077
14.2 UN proper shipping name	Environmentally hazardous substance, solid, n.o.s. (zinc di (benzothiazol-2-yl) disulphide)	Environmentally hazardous substance, solid, n.o.s. (zinc di (benzothiazol-2-yl) disulphide)	Environmentally hazardous substance, solid, n.o.s. (zinc di (benzothiazol-2-yl) disulphide). Marine pollutant (Reaction mass of bis (2,3-epoxypropyl) terephthalate (CAS 7195-44-0) and tris (oxiranylmethyl) benzene-1,2,4-tricarboxylate (CAS 7237-83-4), zinc di(benzothiazol-2-yl) disulphide)	Environmentally hazardous substance, solid, n.o.s. (zinc di (benzothiazol-2-yl) disulphide)
14.3 Transport hazard class(es)	9  	9  	9  	9  
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes.

Additional information

SECTION 14: Transport information

- ADR/RID** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L 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.
Hazard identification number 90
Tunnel code (-)
- ADN** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L 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 ≤5 L 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.
Emergency schedules F-A, S-F
- IATA** : This product is not regulated as a dangerous good when transported in sizes of ≤5 L or ≤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.
- Marking** : The environmental hazardous / marine pollutant mark is only applicable for packages containing more than 5 litres for liquids and 5 kg for solids.

14.6 Special precautions for user : **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 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

Turkey Regulation No. 30105, KKDİK

Annex 14 - List of substances subject to authorization

Annex 14

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex 17 - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles : Restricted to professional users.

Ozone depleting substances

Not listed.

Regulation on the prevention of major industrial accidents and reduction of their effects

This product is controlled under the Regulation on the prevention of major industrial accidents and reduction of their effects.

Danger criteria

Category

E2

EU regulations

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

Annex XIV - List of substances subject to authorisation

Annex XIV

SECTION 15: Regulatory information

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status	Reference number	Date of revision
Mutagen	1,3,5-tris(oxiran-2-ylmethyl)-1,3,5-triazinane-2,4,6-trione	Candidate	ED/87/2012	18.06.2012
Toxic to reproduction	dioctyltin dilaurate, stannane, dioctyl-, bis (coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety	Candidate	D(2020) 9139-DC	19.01.2021

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

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

Not listed.

Persistent Organic Pollutants

Not listed.

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 assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

✔ Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
 EUH statement = SEA-specific Hazard statement
 N/A = Not available
 PBT = Persistent, Bioaccumulative and Toxic
 PNEC = Predicted No Effect Concentration
 SGG = Segregation Group
 vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification according to regulation SEA: RG.-10/12/2020-31330

SECTION 16: Other information

Classification	Justification
Acute Tox. 4, H302	Calculation method
Eye Dam. 1, H318	Calculation method
Skin Sens. 1, H317	Calculation method
Muta. 1B, H340	Calculation method
Repr. 1B, H360	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Chronic 2, H411	Calculation method

Full text of abbreviated H statements

H301	Toxic if swallowed.
H302	Harmful if swallowed.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H331	Toxic if inhaled.
H340	May cause genetic defects.
H360	May damage fertility or the unborn child.
H360D	May damage the unborn child.
H361d	Suspected of damaging the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [SEA/GHS]

Acute Tox. 3	ACUTE TOXICITY - Category 3
Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 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
Muta. 1B	GERM CELL MUTAGENICITY - Category 1B
Repr. 1B	REPRODUCTIVE TOXICITY - Category 1B
Repr. 2	REPRODUCTIVE TOXICITY - Category 2
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2

Date of printing : 22.02.2024

Date of issue/ Date of revision : 22.02.2024

Date of previous issue : 02.01.2024

Version : 1.01

Contact information of certified author

Responsible Person: Deren Ercan
 Mail Address: deren.metiner@jotun.com
 Certificate No: LONCA KDU81/2021.26
 Certificate Expiration Date: 14.10.2026

Notice to reader

The information in this document is given to the best of Jotun's knowledge, based on laboratory testing and practical experience. Jotun's products are considered as semi-finished goods and as such, products are often used under conditions beyond Jotun's control. Jotun cannot guarantee anything but the quality of the product itself. Minor product variations may be implemented in order to comply with local requirements. Jotun reserves the right to change the given data without further notice.

Users should always consult Jotun for specific guidance on the general suitability of this product for their

SECTION 16: Other information

needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.