SAFETY DATA SHEET



Guard Endure D AB S

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

1.1 Product identifier

Product name : Guard Endure D AB S

Product code : 47062

Product type : Powder coating.

Other means of : Not available.

identification

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

Use in coatings - Industrial use

1.3 Details of the supplier of the safety data sheet

JOTUN BOYA SAN. VE TİC. A.Ş. Çerkezköy Organize Sanayi Şubesi G.O.P MAHALLESI 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

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 1/15

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

Skin Sens. 1, H317 Aquatic Chronic 3, H412

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 : Warning.

Hazard statements: H317 - May cause an allergic skin reaction.

H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention : P280 - Wear protective gloves.

P273 - Avoid release to the environment.

P261 - Avoid breathing dust.

Response : P362 + P364 - Take off contaminated clothing and wash it before reuse.

P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention.

Storage : Not applicable.

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

national and international regulations.

Hazardous ingredients : zinc di(benzothiazol-2-yl) disulphide

benzene-1,2,4-tricarboxylic acid 1,2-anhydride

Supplemental label

elements

Not applicable.

Annex 17 - Restrictions on the manufacture, placing

on the market and use of certain dangerous

substances, mixtures and

articles

: Not applicable.

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.

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 2/15

SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	SEA: RG10/12/2020-31330	Type
titanium dioxide	EC: 236-675-5 CAS: 13463-67-7	≥25 - ≤50	Not classified.	[2]
barium sulfate	EC: 231-784-4 CAS: 7727-43-7	≥10 - ≤25	Not classified.	[2]
zinc di(benzothiazol-2-yl) disulphide	EC: 205-840-3 CAS: 155-04-4	≤1.3	Skin Sens. 1, H317 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
3,9-bis(2,4-di-tert-butylphenoxy) -2,4,8,10-tetraoxa- 3,9-diphosphaspiro[5.5] undecane	EC: 247-952-5 CAS: 26741-53-7	≤0.59	Aquatic Chronic 1, H410 (M=1)	[1]
Glass, oxide, silver phosphate	CAS: 308069-39-8	≤0.51	Eye Irrit. 2, H319 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [2]
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	EC: 209-008-0 CAS: 552-30-7	≤0.3	Eye Dam. 1, H318 Resp. Sens. 1, H334 Skin Sens. 1, H317 STOT SE 3, H335	[1] [2]
Propylidynetrimethanol	EC: 201-074-9 CAS: 77-99-6	≤0.3	Repr. 2, H361fd	[1]
			See Section 16 for the full text of the H statements declared above.	

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs 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

: 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. Get medical attention if irritation occurs.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. 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

: 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. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 3/15

SECTION 4: First aid measures

Ingestion

: 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. Get medical attention if adverse health effects persist or are severe. 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. 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 contactInhalationNo known significant effects or critical hazards.No known significant effects or critical hazards.

Skin contact : May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No specific data. **Inhalation** : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion : No specific data.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : In case of inhalation of decomposition products in a fire, symptoms may be delayed.

The exposed person may need to be kept under medical surveillance for 48 hours.

Specific treatments: No specific treatment.

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.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: This material is harmful 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

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 4/15

SECTION 5: Firefighting measures

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.

6.3 Methods and material for containment and cleaning up

Small spill

Move containers from spill area. Avoid dust generation. Using a vacuum with HEPA filter will reduce dust dispersal. 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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

Date of revision : 22.02.2024 : 02.01.2024 Version : 1.01 5/15 Original preparation date

SECTION 7: Handling and storage

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. 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.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

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
tranium dioxide	EU OEL (Europe).
barium sulfate	TWA: 5 mg/m³ 8 hours. ACGIH TLV (United States, 7/2023).
Glass, oxide, silver phosphate	TWA: 5 mg/m³ 8 hours. Form: Inhalable fraction TR ISGGM OEL (Turkey, 12/2013). [Gümüş (çözünür
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	bileşikleri)] TWA: 0.01 mg/m³, (as Ag) 8 hours. ACGIH TLV (United States, 7/2023). Absorbed through skin.
bonzono 1,2,4 modrboxyno dola 1,2 amiyando	Skin sensitiser. Inhalation sensitiser.
	TWA: 0.0005 mg/m³ 8 hours. Form: Inhalable fraction and vapor STEL: 0.002 mg/m³ 15 minutes. Form: Inhalable fraction and vapor

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
titanium dioxide	DNEL	Long term Inhalation	28 μg/m³	General population	Local
	DNEL	Long term	170 μg/m³	Workers	Local
barium sulfate	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Inhalation	10 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	10 mg/m³	Workers	Systemic
	DNEL	Long term Oral	13000 mg/ kg bw/day	General population	Systemic
zinc di(benzothiazol-2-yl) disulphide	DNEL	Long term Oral	0.6 mg/kg	General	Systemic

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 6/15

SECTION 8: Exposure controls/personal protection

	DATE		bw/day	population	0 1 :
	DNEL	Long term Inhalation	1 mg/m³	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 Inhalation	5.9 mg/m ³	Workers	Systemic
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
	DNEL	Long term Inhalation	2.75 mg/m ³	Workers	Systemic
Propylidynetrimethanol	DNEL	Long term Inhalation	3.3 mg/m³	Workers	Systemic
	DNEL	Long term Oral	0.34 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.34 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.58 mg/m ³	General population	Systemic
	DNEL	Long term Dermal	0.94 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3.3 mg/m ³	Workers	Systemic

PNECs

No PNECs available

8.2 Exposure controls

Appropriate engineering controls

: Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

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: safety glasses with side-shields.

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.

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 7/15

SECTION 8: Exposure controls/personal protection

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), 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.

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 : Not applicable.

boiling range

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

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 8/15

Guard Endure D AB S

SECTION 9: Physical and chemical properties

Partition coefficient: n-octanol/ : Not applicable.

water

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

10.6 Hazardous

decomposition products

: No specific data.

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
zinc di(benzothiazol-2-yl) disulphide	LD50 Oral	Rat	540 mg/kg	-
Propylidynetrimethanol	LD50 Oral	Rat	14000 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	(vapours)	Inhalation (dusts and mists) (mg/l)
propylidynetrimethanol	14000	N/A	N/A	N/A	N/A

Irritation/Corrosion

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 9/15

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
titanium dioxide 3,9-bis(2,4-di-tert-	Skin - Mild irritant Skin - Severe irritant	Human Rabbit	-	72 hours 0.5 Grams	-
butylphenoxy) -2,4,8,10-tetraoxa-					
3,9-diphosphaspiro[5.5] undecane benzene-1,2,4-tricarboxylic	Eyes - Irritant	Mammal -	_	_	_
acid 1,2-anhydride	2,00	species unspecified			

Conclusion/Summary

: Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
zinc di(benzothiazol-2-yl) disulphide	skin	Mammal - species unspecified	Sensitising
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	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

: Not available. **Conclusion/Summary** Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	Category 3		Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on likely routes : Not available.

of exposure

Potential acute health effects

Eye contact : No known significant effects or critical hazards. : No known significant effects or critical hazards. Inhalation

Skin contact : May cause an allergic skin reaction.

: No known significant effects or critical hazards. Ingestion

Symptoms related to the physical, chemical and toxicological characteristics

: No specific data. **Eye contact** Inhalation : No specific data.

: Adverse symptoms may include the following: **Skin contact**

> irritation redness

Date of revision : 22.02.2024 :02.01.2024 Version : 1.01 10/15 Original preparation date

SECTION 11: Toxicological information

Ingestion : No specific data.

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

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects

: Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

Conclusion/Summary

: Not available.

General

: Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No
Mutagenicity : No
Reproductive toxicity : No

No known significant effects or critical hazards.
No known significant effects or critical hazards.
No known significant effects or critical hazards.

Other information : Not available.

SECTION 12: Ecological information

12.1 Toxicity

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
zinc di(benzothiazol-2-yl) disulphide	Acute EC50 0.71 mg/l	Daphnia	48 hours
·	Acute LC50 0.73 mg/l	Fish	96 hours
	Chronic NOEC 0.041 mg/l	Fish	89 days
3,9-bis(2,4-di-tert- butylphenoxy) -2,4,8,10-tetraoxa- 3,9-diphosphaspiro[5.5] undecane	Acute EC10 15.4 mg/l	Algae	72 hours
	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

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

12.2 Persistence and degradability

Conclusion/Summary : Not available.

12.3 Bioaccumulative potential

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 11/15

Guard Endure D AB S

SECTION 12: Ecological information

Product/ingredient name	LogPow	BCF	Potential
zinc di(benzothiazol-2-yl) disulphide	5.02	<8	low
benzene-1,2,4-tricarboxylic acid 1,2-anhydride	0.06	-	low
Propylidynetrimethanol	-0.47	<1	low

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility

: Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 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

Waste list

: Yes.

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 spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	Not regulated.	Not regulated.	Not regulated.	Not regulated.
14.2 UN proper shipping name	-	-	-	-
14.3 Transport hazard class(es)	-	-	-	-

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 12/15

Guard Endure D AB S					
SECTION 14: Transport information					
14.4 Packing group	-	-	-	-	

user

14.5

hazards

Environmental

14.6 Special precautions for : Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in

No.

No.

the event of an accident or spillage.

No.

14.7 Transport in bulk according to IMO instruments

: Not available.

SECTION 15: Regulatory information

No.

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

Turkey Regulation No. 30105, KKDIK

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 : Not applicable. on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Ozone depleting substances

Not listed.

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

This product is not controlled under the Regulation on the prevention of major industrial accidents and reduction of their effects.

EU regulations

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

Annex XIV - List of substances subject to authorisation

Annex XIV

None of the components are listed.

Substances of very high concern

Intrinsic property	Ingredient name	Status		Date of revision
Substance of equivalent concern for human health	benzene-1,2,4-tricarboxylic acid 1,2-anhydride	Recommended	ED/71/2019	14.04.2021

Annex XVII - Restrictions : Not applicable.

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

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

Date of revision :02.01.2024 : 22.02.2024 Original preparation date Version: 1.01 13/15

SECTION 15: Regulatory information

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

Classification	Justification	
Skin Sens. 1, H317 Aquatic Chronic 3, H412	Calculation method Calculation method	

Full text of abbreviated H statements

H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	May cause respiratory irritation.
H361fd	Suspected of damaging fertility. Suspected of damaging the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Full text of classifications [SEA/GHS]

Α	quatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Α	quatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Α	quatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
E	ye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
E	ye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
R	lepr. 2	REPRODUCTIVE TOXICITY - Category 2
R	tesp. Sens. 1	RESPIRATORY SENSITISATION - Category 1
	kin Sens. 1	SKIN SENSITISATION - Category 1
S	TOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 14/15

Guard Endure D AB S

SECTION 16: Other information

Date of printing : 22.02.2024 Date of issue/ Date of : 22.02.2024

revision

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 needs and specific application practices.

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

Date of revision : 22.02.2024 Original preparation date : 02.01.2024 Version : 1.01 15/15