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

### 1.1 Product identifier

Product name : Tankguard Zinc Comp A

Product code : 10200
Product description : Paint.
Product type : Liquid.
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
Use in coatings - Professional use

### 1.3 Details of the supplier of the safety data sheet

Jotun Boya Sanayi ve Ticaret A.Ş. Balabandere Caddesi, Hilpark Suites Sitesi No: 10, İstinye 34460 Sarıyer, İstanbul

Tel. +90 212 279 7878 SDSJotun@jotun.com

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

Original preparation date : 24.07.2023

### 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

Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336

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

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 1/19

### **SECTION 2: Hazards identification**

**Hazard pictograms** 





Signal word : Danger.

**Hazard statements** : H225 - Highly flammable liquid and vapour.

H319 - Causes serious eye irritation.

H336 - May cause drowsiness or dizziness.

**Precautionary statements** 

General : Not applicable.

**Prevention**: P280 - Wear eye or face protection.

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P261 - Avoid breathing vapour.

Response : P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

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

national and international regulations.

Hazardous ingredients : 1-methoxypropan-2-ol

Ethanol

2-butoxyethanol

Supplemental label

elements

: Not applicable.

: Not applicable.

Annex 17 - Restrictions on

the manufacture, placing on the market and use of certain dangerous

substances, mixtures and

articles

**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: RG10/12/2020-31330	Type
1-methoxypropan-2-ol	EC: 203-539-1 CAS: 107-98-2	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
Ethanol	EC: 200-578-6 CAS: 64-17-5	≥10 - ≤25	Flam. Liq. 2, H225 Eye Irrit. 2, H319	[1] [2]
2-butoxyethanol	EC: 203-905-0 CAS: 111-76-2	≤8.2	Acute Tox. 4, H302 Acute Tox. 3, H331	[1] [2]

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 2/19

### **SECTION 3: Composition/information on ingredients**

Index: 603-014-00-0				See Section 16 for the full text of the H statements declared above.	
Figure   Figure				Asp. Tox. 1, H304	
Figure   Figure				Skin Irrit. 2, H315 Eye Irrit. 2, H319	
Eye Irrit. 2, H319   Eye Irrit. 2, H319     Eye Irrit. 2, H319     EC: 200-661-7   CAS: 67-63-0   Index: 603-117-00-0   Eye Irrit. 2, H319   Eye Irrit. 2, H319   Eye Irrit. 2, H319   Eye Irrit. 2, H319   Eye Irrit. 2, H336   EC: 201-083-8   CAS: 78-10-4   Index: Eye Irrit. 2, H319   Eye Irrit. 2, H3	xylene		≤1.7	Acute Tox. 4, H312	[1] [2]
603-014-00-0   Eye Irrit. 2, H319	tetraethyl silicate	CAS: 78-10-4 Index:	≤5	Acute Tox. 4, H332 Eye Irrit. 2, H319	[1] [2]
		603-014-00-0 EC: 200-661-7 CAS: 67-63-0 Index: 603-117-00-0		Eye Irrit. 2, H319  Flam. Liq. 2, H225  Eye Irrit. 2, H319  STOT SE 3, H336	

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.

Inhalation

: 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. Get medical attention. If necessary, call a poison center or physician. 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.

**Skin contact** 

: Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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 necessary, call a poison center or 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.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 3/19

### **SECTION 4: First aid measures**

**Protection of first-aiders** 

: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

#### 4.2 Most important symptoms and effects, both acute and delayed

#### Potential acute health effects

**Eye contact** : Causes serious eye irritation.

**Inhalation** : May cause drowsiness or dizziness.

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

#### Over-exposure signs/symptoms

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

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness No specific data

Skin contact: No specific data.Ingestion: No specific data.

#### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

### **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing media

: Use dry chemical, CO2, water spray (fog) or foam.

**Unsuitable extinguishing** 

media

: Do not use water jet.

### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.

Hazardous thermal decomposition products

 Decomposition products may include the following materials: carbon dioxide

carbon monoxide 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. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 4/19

### **SECTION 5: Firefighting measures**

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. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. 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).

### 6.3 Methods and material for containment and cleaning up

**Small spill** 

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

## 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). Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapour or mist. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 5/19

### SECTION 7: Handling and storage

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 a segregated and approved area. 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. Eliminate all ignition sources. Separate from oxidising materials. 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**

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne

### 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

### Occupational exposure limits

Product/ingredient name	Exposure limit values
<b>1</b> -methoxypropan-2-ol	TR ISGGM OEL (Turkey, 12/2013). Absorbed through skin.
	TWA: 375 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
	STEL: 568 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
Ethanol	ACGIH TLV (United States, 1/2023).
O hard are all and I	STEL: 1000 ppm 15 minutes.
2-butoxyethanol	TR ISGGM OEL (Turkey, 12/2013). Absorbed through skin.
	TWA: 98 mg/m³ 8 hours.
	TWA: 20 ppm 8 hours. STEL: 246 mg/m³ 15 minutes.
	STEL: 50 ppm 15 minutes.
propen 2 of	· ·
propan-2-ol	ACGIH TLV (United States, 1/2023). TWA: 200 ppm 8 hours.
	STEL: 400 ppm 15 minutes.
tetraethyl silicate	EU OEL (Europe, 1/2022). Notes: list of indicative
tetraetry silicate	occupational exposure limit values
	TWA: 5 ppm 8 hours.
	TWA: 44 mg/m³ 8 hours.
xylene	TR ISGGM OEL (Turkey, 12/2013). [Xylene (pure and mixed
- Ayrene	isomers)] Absorbed through skin.
	TWA: 221 mg/m <sup>3</sup> 8 hours.
	TWA: 50 ppm 8 hours.
	STEL: 442 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.

#### **Biological exposure indices**

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 6/19

### SECTION 8: Exposure controls/personal protection

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
<mark>1</mark> -methoxypropan-2-ol	DNEL	Long term Oral	33 mg/kg	General	Systemic
	DNEL	Long term	bw/day 43.9 mg/m³	population General	Systemic
	DNEL	Inhalation Long term Dermal	78 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 183 mg/kg	population Workers	Systemic
	DNEL	Long term	bw/day 369 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			
	DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Systemic
Ethanol	DNEL	Long term Inhalation	380 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Oral	87 mg/kg	General	Systemic
	DNEL	Long term Inhalation	bw/day 114 mg/m³	population General	Systemic
	DNEL	Long term Dermal	206 mg/kg	population General	Systemic
	DNEL	Long term Dermal	bw/day 343 mg/kg	population Workers	Systemic
	DNEL	Short term	bw/day 950 mg/m³	General	Local
	DNEL	Inhalation Short term	1900 mg/	population Workers	Local
2-butoxyethanol	DNEL	Inhalation Short term Dermal	m³ 89 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	663 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Short term Inhalation	246 mg/m³	Workers	Local
	DNEL	Long term Dermal	75 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	98 mg/m³	Workers	Systemic
	DNEL	Short term Dermal	44.5 mg/ kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	426 mg/m³	[Consumers] General population [Consumers]	Systemic
	DNEL	Short term Oral	13.4 mg/ kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	123 mg/m <sup>3</sup>	General population [Consumers]	Local

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 7/19

### **SECTION 8: Exposure controls/personal protection**

		<b>_</b>			
	DNEL	Long term Dermal	38 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	49 mg/m³	[Consumers] General population	Systemic
	DNEL	Long term Oral	3.2 mg/kg	[Consumers] General	Systemic
	DNEL	Long term Oral	bw/day 6.3 mg/kg	population [Consumers] General	Systemic
	DNEL	Short term Oral	bw/day 26.7 mg/	population General	Systemic
	DNEL	Long term Inhalation	kg bw/day 59 mg/m³	population General	Systemic
	DNEL	Long term Inhalation	98 mg/m³	population Workers	Systemic
	DNEL	Short term Inhalation	147 mg/m³	General population	Local
	DNEL	Short term Inhalation	246 mg/m <sup>3</sup>	Workers	Local
	DNEL	Short term Inhalation	426 mg/m <sup>3</sup>	General population	Systemic
propan-2-ol	DNEL	Short term Inhalation Long term Dermal	1091 mg/ m³ 888 mg/kg	Workers Workers	Systemic Systemic
propari 2 di	DNEL	Long term	bw/day 500 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Inhalation Long term Dermal	319 mg/kg	General	Systemic
	DAIE		bw/day	population [Consumers]	
	DNEL	Long term Inhalation Long term Oral	89 mg/m <sup>3</sup> 26 mg/kg	Workers General	Systemic Systemic
	DINEL	Long term Oral	bw/day	population [Consumers]	Systemic
	DNEL	Long term Inhalation	500 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Dermal	888 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral Short term Oral	26 mg/kg bw/day 51 mg/kg	General population General	Systemic Systemic
	DNEL	Long term	bw/day 89 mg/m³	population General	Systemic
	DNEL	Inhalation Short term	178 mg/m³	population General	Systemic
	DNEL	Inhalation Long term Dermal	319 mg/kg	population General	Systemic
	DNEL	Short term Inhalation	bw/day 1000 mg/ m³	population Workers	Systemic
tetraethyl silicate	DNEL	Short term Dermal	12.1 mg/ kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	85 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	85 mg/m³	Workers	Local
	DNEL	Long term Dermal	12.1 mg/ kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation Long term	85 mg/m <sup>3</sup> 85 mg/m <sup>3</sup>	Workers Workers	Systemic Local
	D: 1LL	25119 (51111	30 mg/m		

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 8/19

## **SECTION 8: Exposure controls/personal protection**

<u> </u>		-	1		
	DAIEI	Inhalation	0.4	0	0
	DNEL	Short term Dermal	8.4 mg/kg bw/day	General population	Systemic
			DW/day	[Consumers]	
	DNEL	Short term	25 mg/m³	General	Systemic
	DIVLE	Inhalation	20 mg/m	population	Cycloniio
		I I I I I I I I I I I I I I I I I I I		[Consumers]	
	DNEL	Short term	25 mg/m³	General	Local
		Inhalation	J.	population	
				[Consumers]	
	DNEL	Long term Dermal	8.4 mg/kg	General	Systemic
			bw/day	population	
				[Consumers]	
	DNEL	Long term	25 mg/m³	General	Systemic
		Inhalation		population	
	חאבו	1 4	05/3	[Consumers]	1 1
	DNEL	Long term Inhalation	25 mg/m <sup>3</sup>	General	Local
		IIIIIaiaiiUII		population [Consumers]	
	DNEL	Long term Dermal	1.8 mg/kg	General	Systemic
	DITLL	Long tomi Domia	bw/day	population	
	DNEL	Short term	5.3 mg/m <sup>3</sup>	General	Local
		Inhalation	,	population	
	DNEL	Long term	5.3 mg/m <sup>3</sup>	General	Local
		Inhalation		population	
	DNEL	Short term	5.3 mg/m <sup>3</sup>	General	Systemic
		Inhalation		population	
	DNEL	Long term	5.3 mg/m <sup>3</sup>	General	Systemic
	DAIEI	Inhalation	0.0	population	0
	DNEL	Long term Dermal	6.3 mg/kg	Workers	Systemic
	DNEL	Short term	bw/day 44 mg/m³	Workers	Local
	DINLL	Inhalation	44 mg/m	WORKEIS	Local
	DNEL	Long term	44 mg/m³	Workers	Local
		Inhalation	,		
	DNEL	Short term	44 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term	44 mg/m³	Workers	Systemic
		Inhalation			
xylene	DNEL	Long term Oral	12.5 mg/	General	Systemic
	ראבי	Land tame	kg bw/day	population	
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term	65.3 mg/m <sup>3</sup>		Systemic
	DINEL	Inhalation	30.0 mg/m	population	Systemio
	DNEL	Long term Dermal	125 mg/kg	General	Systemic
	<b></b>		bw/day	population	,
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic
			bw/day		
	DNEL	Long term	221 mg/m <sup>3</sup>	Workers	Local
	<b></b>	Inhalation			
	DNEL	Long term	221 mg/m <sup>3</sup>	Workers	Systemic
	ראבי	Inhalation	260	Conoral	Local
	DNEL	Short term Inhalation	260 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term	260 mg/m <sup>3</sup>	General	Systemic
	DINEL	Inhalation	200 mg/m	population	Сузісній
	DNEL	Short term	442 mg/m³	Workers	Local
		Inhalation			
	DNEL	Short term	442 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			-
		l .	<u> </u>		

**PNECs** 

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 9/19

### **SECTION 8: Exposure controls/personal protection**

Product/ingredient name	Compartment Detail	Value	Method Detail
1-methoxypropan-2-ol	Fresh water	10 mg/l	_
31 1	Marine	1 mg/l	-
	Sewage Treatment	100 mg/l	-
	Plant		
	Fresh water sediment	52.3 mg/kg dwt	-
	Marine water sediment	5.2 mg/kg dwt	-
	Soil	5.49 mg/kg dwt	-
2-butoxyethanol	Fresh water	8.8 mg/l	-
	Marine	0.88 mg/l	-
	Sewage Treatment	463 mg/l	-
	Plant		
	Fresh water sediment	34.6 mg/kg dwt	-
	Marine water sediment	3.46 mg/kg dwt	-
	Soil	3.13 mg/kg dwt	-
	Secondary Poisoning	20 mg/kg	-
propan-2-ol	Fresh water	140.9 mg/l	-
	Marine	140.9 mg/l	-
	Sewage Treatment	2251 mg/l	-
	Plant		
	Fresh water sediment	552 mg/kg dwt	-
	Marine water sediment	552 mg/kg dwt	-
	Soil	28 mg/kg dwt	-
	Secondary Poisoning	160 mg/kg	-
tetraethyl silicate	Fresh water	0.19 mg/l	-
	Marine	0.019 mg/l	-
	Sewage Treatment	4000 mg/l	-
	Plant		
	Fresh water sediment	0.83 mg/kg dwt	-
	Marine water sediment	0.083 mg/kg dwt	-
	Soil	0.05 mg/kg dwt	-
xylene	Fresh water	0.327 mg/l	-
	Marine	0.327 mg/l	-
	Sewage Treatment	6.58 mg/l	-
	Plant		
	Fresh water sediment	12.46 mg/kg dwt	-
	Marine water sediment	12.46 mg/kg dwt	-
	Soil	2.31 mg/kg dwt	-

### 8.2 Exposure controls

Appropriate engineering controls

: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### **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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

**Eye/face protection** 

: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

**Skin protection** 

Hand protection

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 10/19

### **SECTION 8: Exposure controls/personal 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: nitrile rubber (> 0.75 mm), butyl rubber (> 0.4 mm), Viton® (> 0.7 mm), 4H/Silver Shield® (> 0.07 mm) May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm), Teflon (> 0.35 mm)

Not recommended, gloves(breakthrough time) < 1 hour: PVC (> 0.5 mm), polyvinyl alcohol (PVA) (> 0.3 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. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

### 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 : Liquid.
Colour : Grey

Odour : Characteristic.

Odour threshold : Not applicable.

Melting point/freezing point : Not applicable.

Initial boiling point and : >36°C (>96.8°F)

boiling range

Flammability (solid, gas) : Not applicable.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 11/19

### SECTION 9: Physical and chemical properties

Upper/lower flammability or

explosive limits

: 0.8 - 23%

: Closed cup: 16°C (60.8°F) Flash point

**Auto-ignition temperature** : Lowest known value: 222°C (431.6°F) (tetraethyl silicate).

**Decomposition temperature** Not available. pН : Not applicable.

Kinematic (40°C): >20.5 mm<sup>2</sup>/s **Viscosity** 

Solubility(ies)

Media	Result
cold water	Not soluble
hot water	Not soluble

Partition coefficient: n-octanol/: Not available.

water

: Highest known value: 5.7 kPa (42.9 mm Hg) (at 20°C) (ethanol). Weighted Vapour pressure

average: 2.54 kPa (19.05 mm Hg) (at 20°C)

Highest known value: 1.7 (ethanol) Weighted average: 1.05compared with butyl

acetate

**Density** : 1.085 g/cm<sup>3</sup>

Vapour density Highest known value: 7.22 (Air = 1) (tetraethyl silicate). Weighted average:

2.91 (Air = 1)

**Explosive properties** : Not available. **Oxidising properties** : Not available.

**Particle characteristics** 

Median particle size : Not applicable.

#### 9.2 Other information

No additional information.

### SECTION 10: Stability and reactivity

10.1 Reactivity : No specific test data related to reactivity available for this product or its ingredients.

10.2 Chemical stability : The product is stable.

10.3 Possibility of : Under normal conditions of storage and use, hazardous reactions will not occur. hazardous reactions

10.4 Conditions to avoid Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld,

braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials : Reactive or incompatible with the following materials:

oxidising materials

10.6 Hazardous decomposition products Under normal conditions of storage and use, hazardous decomposition products

should not be produced.

Shelf life at 23 °C month(s)

### SECTION 11: Toxicological information

11.1 Information on toxicological effects

**Acute toxicity** 

Date of revision : 29.11.2023 : 24.07.2023 Version: 1.01 12/19 Original preparation date

## **SECTION 11: Toxicological information**

Product/ingredient name	Result	Species	Dose	Exposure
	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-
Ethanol	LC50 Inhalation Vapour	Rat	124700 mg/m <sup>3</sup>	4 hours
2-butoxyethanol	LD50 Oral	Guinea pig -	1414 mg/kg	-
		Male, Female		
	LD50 Oral	Rat - Male,	1300 mg/kg	-
		Female		
propan-2-ol	LD50 Dermal	Rabbit	12800 mg/kg	-
	LD50 Oral	Rat	5000 mg/kg	-
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 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)
▼ankguard Zinc Comp A	17142.9	73333.3	N/A	37.0	N/A
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A
ethanol	7000	N/A	N/A	124.7	N/A
2-butoxyethanol	1200	N/A	N/A	3	N/A
propan-2-ol	5000	12800	N/A	N/A	N/A
tetraethyl silicate	N/A	N/A	N/A	11	N/A
xylene	4300	1100	N/A	20	N/A

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
√methoxypropan-2-ol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				mg	
	Skin - Mild irritant	Rabbit	-	500 mg	-
Ethanol	Eyes - Moderate irritant	Rabbit	-	100	-
				microliters	
	Skin - Mild irritant	Rabbit	-	400	-
0.1 1 1	Francisco Marchaelando Societa de	D. 1.1.14		milligrams	
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	24 hours 100	-
	Skin - Mild irritant	Rabbit		mg	
propan-2-ol	Eyes - Moderate irritant	Rabbit	-	500 mg 24 hours 100	-
ргорап-2-ог	Lyes - Moderate Imitant	Nabbit	_	milligrams	-
	Skin - Mild irritant	Rabbit	_	500	_
	January Maria	, tabbit		milligrams	
tetraethyl silicate	Eyes - Mild irritant	Mammal -	-	-	-
-		species			
		unspecified			
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60	-
				microliters	

**Conclusion/Summary** 

: Not available.

**Sensitisation** 

Conclusion/Summary : N

: Not available.

**Mutagenicity** 

Conclusion/Summary :

: Not available.

**Carcinogenicity** 

**Conclusion/Summary**: Not available.

**Reproductive toxicity** 

**Conclusion/Summary**: Not available.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 13/19

### **SECTION 11: Toxicological information**

**Teratogenicity** 

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

Product/ingredient name	Category	Route of exposure	Target organs
1-methoxypropan-2-ol propan-2-ol tetraethyl silicate	Category 3 Category 3 Category 3	- - -	Narcotic effects Narcotic effects Respiratory tract irritation
xylene	Category 3	-	Respiratory tract irritation

### Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Product/ingredient name	Result
xylene	ASPIRATION HAZARD - Category 1

**Information on likely routes**: Not available.

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : May cause drowsiness or dizziness.

Skin contact : No known significant effects or critical hazards. Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

pain or irritation watering redness

**Inhalation** : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

**Skin contact** : No specific data. : No specific data. Ingestion

### 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.

Date of revision : 24.07.2023 : 29.11.2023 Original preparation date Version: 1.01 14/19

### Conforms to regulation No. 30105, Turkey KKDIK, Annex 2

Tankguard Zinc Comp A

### **SECTION 11: Toxicological information**

General : No known significant effects or critical hazards.
 Carcinogenicity : No known significant effects or critical hazards.
 Mutagenicity : No known significant effects or critical hazards.
 Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

### **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
2-butoxyethanol	butoxyethanol Acute EC50 1000 mg/l Fresh water Daphnia - Daphnia magna		48 hours
	Acute LC50 1000 mg/l Marine water	Crustaceans -	48 hours
		Chaetogammarus marinus -	
		Young	
propan-2-ol	Acute EC50 10100 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 4200 mg/l Fresh water	Fish - Rasbora heteromorpha	96 hours
xylene	Acute LC50 8500 μg/l Marine water	Crustaceans - Palaemonetes pugio	48 hours
	Acute LC50 13400 μg/l Fresh water	Fish - Pimephales promelas	96 hours

**Conclusion/Summary**: No known significant effects or critical hazards.

### 12.2 Persistence and degradability

**Conclusion/Summary**: Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
<b>x</b> ylene	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
<b></b> rmethoxypropan-2-ol	<1	-	low
Ethanol	-0.35	-	low
2-butoxyethanol	0.81	-	low
propan-2-ol	0.05	-	low
tetraethyl silicate	3.18	-	low
xylene	3.12	8.1 to 25.9	low

### 12.4 Mobility in soil

Soil/water partition : Not available. coefficient (Koc)

Mobility : Not available.

### 12.5 Results of PBT and vPvB assessment

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

**12.6 Other adverse effects** : No known significant effects or critical hazards.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 15/19

### **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 nonrecyclable 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. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. 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	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	Paint	Paint	Paint	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	11	II	II	II
14.5 Environmental hazards	No.	No.	No.	No.

### **Additional information**

ADR/RID : Hazard identification number 33

Special provisions 640 (C)

Tunnel code (D/E)

**ADN** : Special provisions 640 (C)

**IMDG Emergency schedules** F-E, S-E

user

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

Date of revision : 29.11.2023 : 24.07.2023 Version : 1.01 16/19 Original preparation date

### Conforms to regulation No. 30105, Turkey KKDIK, Annex 2

Tankguard Zinc Comp A

### **SECTION 14: Transport information**

14.7 Transport in bulk according to IMO

: Not available.

: Not applicable.

### **SECTION 15: Regulatory information**

### 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<sub>14</sub>

instruments

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

#### **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

P5c

#### **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

None of the components are listed.

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)

Not listed.

### **Persistent Organic Pollutants**

Not listed.

### **International regulations**

### Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

### **Montreal Protocol**

Not listed.

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 17/19

### **SECTION 15: Regulatory information**

### **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.

assessment

15.2 Chemical safety

: 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** 

: ATE = Acute Toxicity Estimate

acronyms

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
· ·	On basis of test data Calculation method
STOT SE 3, H336	Calculation method

### Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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 Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

Date of printing : 29.11.2023 Date of issue/ Date of : 29.11.2023

revision

Date of previous issue : 24.07.2023

Version : 1.01

Contact information of certified author

Date of revision : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 18/19

### Conforms to regulation No. 30105, Turkey KKDIK, Annex 2

Tankguard Zinc Comp A

### **SECTION 16: Other information**

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 : 29.11.2023 Original preparation date : 24.07.2023 Version : 1.01 19/19