# SAFETY DATA SHEET



## Tankguard DW Comp A

# Section 1. Identification of the substance/mixture and of the company/undertaking

GHS product identifier	: Tankguard DW Comp A
Product code	: 9440
Other means of identification	: Not available.
Product description	: Paint.
Product type	: Liquid.

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

Use in coatings - Industrial use Use in coatings - Professional use

Manufacturing country :	Jotun Thailand Limited 700/353 Amata Nakorn Industrial Estate (BIP 2) Moo 6, Tumbol Donhualoh, Amphur Muang Chonburi Chonburi 20000 Thailand
	Phone: + 66 2 022 9888 Fax: + 66 2 022 9888 , + 66 38 214 375
	SDSJotun@jotun.com
Emergency telephone : number	Jotun Thailand Limited Phone: + 66 2 022 9888 ext. 2100, 2400, 2402

## Section 2. Hazards identification

Classification of the substance or mixture	: SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SKIN SENSITISATION - Category 1A LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
GHS label elements	
Hazard pictograms	
Signal word	: Warning.
Hazard statements	<ul> <li>H315 - Causes skin irritation.</li> <li>H317 - May cause an allergic skin reaction.</li> <li>H319 - Causes serious eye irritation.</li> <li>H411 - Toxic to aquatic life with long lasting effects.</li> </ul>
Precautionary statements	

## Section 2. Hazards identification

Prevention       : P280 - Wear protective gloves. Wear eye or face protection.         P273 - Avoid release to the environment.       P261 - Avoid breathing vapour.	
F201 - Avoid breating vapour.	
Response: P391 - Collect spillage. P362 - Take off contaminated clothing and wash before reuse. P363 - Wash contaminated clothing 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 - IF IN EYES: Rinse cautiously with water for several minute Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.	IS.
Storage : Not applicable.	
<b>Disposal</b> : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.	

Other hazards which do not		None known.
result in classification		

## Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of	: Not available.
identification	

Ingredient name	%	CAS number
epoxy-formaldehyde resin (MW<700)	≥25 - ≤50	9003-36-5
epoxy resin (MW ≤ 700)	≥10 - ≤25	1675-54-3
oxirane, 2,2'-[1,6-hexanediylbis(oxymethylene)]bis-	≤10	16096-31-4
complex mixture of diamid waxes	≤3	-

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 and hence require reporting in this section.

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

## Section 4. First aid measures

#### **Description of necessary 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 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.
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.

### Section 4 First aid measures

Ingestion	ash out mouth with water. Remove dentur	res if any If material has been
	vallowed and the exposed person is consci ink. Stop if the exposed person feels sick duce vomiting unless directed to do so by r e head should be kept low so that vomit do tention if adverse health effects persist or a	ious, give small quantities of water to as vomiting may be dangerous. Do not medical personnel. If vomiting occurs, bes not enter the lungs. Get medical are severe. Never give anything by
	outh to an unconscious person. If unconso edical attention immediately. Maintain an o a collar, tie, belt or waistband.	
Most important symptoms/e	acute and delayed	
Potential acute health effe		
Eye contact	auses serious eye irritation.	
Inhalation	o known significant effects or critical hazard	ds.
Skin contact	auses skin irritation. May cause an allergic	skin reaction.
Ingestion	o known significant effects or critical hazard	ds.
Over-exposure signs/symp		
Eye contact	dverse symptoms may include the following in or irritation atering dness	g:
Inhalation	o specific data.	
Skin contact	dverse symptoms may include the following itation dness	g:
Ingestion	o specific data.	
Indication of immediate med	tention and special treatment needed, in	<u>f necessary</u>
Notes to physician	eat symptomatically. Contact poison treati antities have been ingested or inhaled.	ment specialist immediately if large
Specific treatments	o specific treatment.	
Protection of first-aiders	o action shall be taken involving any persor ay be dangerous to the person providing ai ash contaminated clothing thoroughly with oves.	id to give mouth-to-mouth resuscitation.

### See toxicological information (Section 11)

# Section 5. Firefighting measures

Extinguishing media		
Suitable extinguishing media	: Use an extinguishing agent suitable for the surrounding fire.	
Unsuitable extinguishing media	: None known.	
Specific hazards arising from the chemical	: In a fire or if heated, a pressure increase will occur and the container may burst. 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.	
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides halogenated compounds metal oxide/oxides	
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# 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.

# Section 6. Accidental release measures

Personal precautions, protec	tive 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. 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".
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.
Methods and material for cor	itainment and cleaning up
Small spill	: Stop leak if without risk. Move containers from spill area. 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. 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 non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product. Note: see Section 1 for emergency contact information and

# Section 7. Handling and storage

#### 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 breathing vapour or mist. 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.

Section 13 for waste disposal.

# Section 7. Handling and storage

Conditions for safe storage,	:	Store in accordance with local regulations. Store in original container protected
including any		from direct sunlight in a dry, cool and well-ventilated area, away from incompatible
incompatibilities		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.

# Section 8. Exposure controls/personal protection

#### Control parameters

<b>Occupational</b>	exposure	<u>limits</u>
Nono		

None.

Appropriate engineering controls	1	Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
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.

Individual protection measure	<u>25</u>
Hygiene measures	: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.
Eye/face protection	: Safety eyewear complying to ISO 16321-1:2022 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.
Skin protection	
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
	<ul> <li>There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.</li> <li>The breakthrough time must be greater than the end use time of the product.</li> <li>The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed.</li> <li>Gloves should be replaced regularly and if there is any sign of damage to the glove material.</li> <li>Always ensure that gloves are free from defects and that they are stored and used correctly.</li> <li>The performance or effectiveness of the glove may be reduced by physical/chemical damage and poor maintenance.</li> <li>Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred.</li> </ul>

# Section 8. Exposure controls/personal protection

	Wear suitable gloves tested to ISO 374-1:2016. May be used, gloves(breakthrough time) 4 - 8 hours: polyvinyl alcohol (PVA) (> 0.3 mm) Recommended, gloves(breakthrough time) > 8 hours: fluor rubber (> 0.35 mm), Viton® (> 0.7 mm), PVC (> 0.5 mm), nitrile rubber (> 0.75 mm), neoprene (> 0.35 mm), butyl rubber (> 0.4 mm)
Body protection	<ul> <li>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.</li> </ul>
Other skin protection	<ul> <li>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.</li> </ul>
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.
	If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. Use respiratory mask with charcoal and dust filter when spraying this product, according to EN 14387(as filter combination A2-P2). In confined spaces, use compressed-air or fresh-air respiratory equipment. When use of roller or brush, consider use of charcoalfilter.

# Section 9. Physical and chemical properties and safety characteristics

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

<u>Appearance</u>		
Physical state	:	Liquid.
Colour	1	Grey, White.
Odour	1	Characteristic.
Odour threshold	1	Not available.
рН	1	Not applicable.
Melting point/freezing point	1	Not applicable.
Boiling point, initial boiling point, and boiling range	:	Lowest known value: >260°C (>500°F)(epoxy resin (MW ≤ 700)).
Flash point	:	Not available.
Evaporation rate	:	Not available.
Flammability	:	Not applicable.
Lower and upper explosion limit/flammability limit	;	Not applicable.
Vapour pressure	:	Highest known value: 0.08 kPa (0.6 mm Hg) (at 20°C) (epoxy-formaldehyde resin (MW<700)).  Weighted average: 0.04 kPa (0.3 mm Hg) (at 20°C)
Relative vapour density	:	Highest known value: 11.7 (Air = 1) (epoxy resin (MW ≤ 700)).
Relative density	:	1.533 to 1.54 g/cm <sup>3</sup>
Solubility	:	cold water Not soluble hot water Not soluble
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Not applicable.
Decomposition temperature	1	Not available.
Viscosity	1	Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)
Flow time (ISO 2431)	1	Not available.
Particle characteristics		

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# Section 9. Physical and chemical properties and safety characteristics

Median particle size

: Not applicable.

Section 10. Stability and reactivity				
Reactivity	: No specific test data related to reactivity available for this product or its ingredients.			
Chemical stability	: The product is stable.			
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.			
Conditions to avoid	: No specific data.			
Incompatible materials	: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.			
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.			

# Section 11. Toxicological information

#### Information on toxicological effects

	<u>Αcu</u>	Ite	tox	ici	ty
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Product/ingredient name	Result	Species	Dose	Exposure
epoxy resin (MW ≤ 700)	LD50 Dermal LD50 Oral		20 g/kg 15600 mg/kg	-

#### Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
epoxy-formaldehyde resin (MW<700)	Skin - Mild irritant	Mammal - species unspecified	-	-	-
epoxy resin (MW ≤ 700)	Eyes - Severe irritant	Rabbit	-	24 hours 2 milligrams	-
	Skin - Mild irritant	Rabbit	-	500 milligrams	-
oxirane, 2,2'- [1,6-hexanediylbis (oxymethylene)]bis-	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
· · · · /•	Skin - Mild irritant	Mammal - species unspecified	-	-	-

#### **Sensitisation**

Product/ingredient name	Route of exposure	Species	Result	
epoxy-formaldehyde resin (MW<700)	skin	Mammal - species unspecified	Sensitising	
epoxy resin (MW ≤ 700)	skin	Mammal - species unspecified	Sensitising	
oxirane, 2,2'- [1,6-hexanediylbis (oxymethylene)]bis-	skin	Mammal - species unspecified	Sensitising	

#### **Mutagenicity**

Not available.

## Section 11. Toxicological information

#### **Carcinogenicity**

Not available.

#### **Reproductive toxicity**

Not available.

#### **Teratogenicity**

Not available.

#### Specific target organ toxicity (single exposure)

Not available.

## Specific target organ toxicity (repeated exposure)

Not available.

#### **Aspiration hazard**

Not available.

Information on likely routes of exposure	:	Not available.
Potential acute health effects		
Eye contact	1	Causes serious eye irritation.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	Causes skin irritation. May cause an allergic skin reaction.
Ingestion	1	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	: No specific data.
Skin contact	: Adverse symptoms may include the following: irritation redness
Ingestion	: No specific data.

#### 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	1	Not available.
Potential delayed effects	:	Not available.
Potential chronic health effe	ect	<u>s</u>
Not available.		
General	:	Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
Carcinogenicity	:	No known significant effects or critical hazards.
Mutagenicity	1	No known significant effects or critical hazards.
Reproductive toxicity	1	No known significant effects or critical hazards.

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# Section 11. Toxicological information

#### Numerical measures of toxicity

Acute toxicity estimates

N/A

## Section 12. Ecological information

#### **Toxicity**

Product/ingredient name	Result	Species	Exposure
epoxy-formaldehyde resin (MW<700)	Acute EC50 2 mg/l	Daphnia	24 hours
	Acute LC50 2 mg/l	Fish	96 hours
epoxy resin (MW ≤ 700)	Acute EC50 1.4 mg/l	Daphnia	48 hours
	Acute LC50 3.1 mg/l	Fish - pimephales promelas	96 hours
	Chronic NOEC 0.3 mg/l	Fish	21 days
oxirane, 2,2'- [1,6-hexanediylbis (oxymethylene)]bis-	Acute EC50 47 mg/l	Daphnia	48 hours
	Acute LC50 30 mg/l	Fish - Cyprinidae (Leuciscus idus)	96 hours

#### Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
epoxy-formaldehyde resin (MW<700)	-	-	Not readily
epoxy resin (MW ≤ 700)	-	-	Not readily

#### Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
epoxy-formaldehyde resin (MW<700) epoxy resin (MW ≤ 700) oxirane, 2,2'- [1,6-hexanediylbis (oxymethylene)]bis-	2.7 2.64 to 3.78 0.822	- 31 -	low low low

#### Mobility in soil

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

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

# Section 13. Disposal considerations

Disposal methods	:	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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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
		emptied containers that have not been cleaned or rinsed out. Empty containers or

## Section 13. Disposal considerations

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

UN number	UN3082		1.10.0000	
			UN3082	UN3082
UN proper shipping name	substanc	nentally hazardous æ, liquid, n.o.s. ormaldehyde resin 0))	Environmentally hazardous substance, liquid, n.o.s. (epoxy-formaldehyde resin (MW<700)). Marine pollutant (epoxy-formaldehyde resin (MW<700), epoxy resin (MW ≤ 700))	Environmentally hazardous substance, liquid, n.o.s. (epoxy-formaldehyde resin (MW<700))
Transport hazard class(es)	9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	9	9
Packing group	111		III	111
Environmental hazards	Yes.		Yes.	Yes.
Additional informat	ion			
IMDG		or ≤5 kg, provided and 4.1.1.4 to 4.1. <u>Hazard identifica</u> <u>Tunnel code</u> (-) : This product is no	<b>ition number</b> 90 t regulated as a dangerous good w t the packagings meet the general .1.8. <b>dules</b> F-A, S-F	provisions of 4.1.1.1, 4.1.1.2 /hen transported in sizes of ≤5 I
IATA : This product is not regulated as a dangerous good when transported in size 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.				
Special precautions	for user		<b>user's premises:</b> always transpo e. Ensure that persons transporting cident or spillage.	
Transport in bulk ac to IMO instruments	cording	: Not available.		
Section 15. F	Regula	tory informa	tion	

#### **International regulations**

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

#### **Montreal Protocol**

Not listed.

#### Stockholm Convention on Persistent Organic Pollutants

## Section 15. Regulatory information

Not listed.

#### Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

## Section 16. Other information

<u>History</u>	
Date of printing	: 30.01.2025
Date of issue/Date of revision	: 30.01.2025
Date of previous issue	: 04.07.2024
Version	: 1.02
Key to abbreviations	<ul> <li>ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = International Air Transport Association IBC = International Maritime Dangerous Goods LogPow = logarithm of the octanol/water partition coefficient MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) N/A = Not available SGG = Segregation Group UN = United Nations</li> </ul>

#### Procedure used to derive the classification

Classification	Justification
SKIN CORROSION/IRRITATION - Category 2	Calculation method
SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITISATION - Category 1A	Calculation method
LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2	Calculation method

#### References

: Not available.

#### Indicates information that has changed from previously issued version.

#### 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.