SAFETY DATA SHEET



Jotun Facade 1407 (B001)

Section 1. Identification

GHS product identifier	: Jotun Facade 1407 (B001)
Other means of identification	: Not available.
Product code	: 37267
Product type	: Powder coating.

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

Identified uses		
Use in coatings - Industrial 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. 3101, 2400, 2402	

Section 2. Hazards identification

: ACUTE TOXICITY (oral) - Category 4 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1 SKIN SENSITISATION - Category 1 GERM CELL MUTAGENICITY - Category 1B SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 3 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
: Danger.
: H302 - Harmful if swallowed.
H318 - Causes serious eye damage.
H317 - May cause an allergic skin reaction.
H340 - May cause genetic defects.
H412 - Harmful to aquatic life with long lasting effects.

Section 2. Hazards identification

Prevention	: P201 - Obtain special instructions before use.
1 Tovolition	P202 - Do not handle until all safety precautions have been read and understood.
	P281 - Use personal protective equipment as required.
	P280 - Wear protective gloves. Wear eye or face protection.
	P273 - Avoid release to the environment.
	P270 - Do not eat, drink or smoke when using this product.
	P264 - Wash hands thoroughly after handling.
Response	: P308 + P313 - IF exposed or concerned: Get medical attention.
	P301 + P312 + P330 - IF SWALLOWED: Call a POISON CENTER or physician if
	you feel unwell. Rinse mouth.
	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
	P333 + P313 - If skin irritation or rash occurs: Get medical attention.
	P305 + P351 + P338 + P310 - IF IN EYES: Rinse cautiously with water for several
	minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	Immediately call a POISON CENTER or physician.
Storage	: P405 - Store locked up.
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional,
	national and international regulations.
ther hazards which do not	: None known.

Section 3. Composition/information on ingredients

Substance/mixture	1	Mixture
Other means of identification	:	Not available.

CAS number/other identifiers

result in classification

CAS number	: Not applicable.
EC number	: Mixture.
Product code	: 37267

Ingredient name	%	CAS number
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1h,3h,5h)-trione	<10	2451-62-9
zinc di(benzothiazol-2-yl) disulphide	<1	155-04-4

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 necessar	<u>y first aid measures</u>
Eye contact	: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.
Inhalation	: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Date of issue : 21.08.2020	
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Section 4. First aid measures

Skin contact	: Get medical attention immediately. Call a poison center or physician. Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Chemical burns must be treated promptly by a physician. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/e	fects, acute and delayed
Potential acute health effect	<u>ts</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
Over-exposure signs/symp	<u>toms</u>
Eye contact	: Adverse symptoms may include the following: pain watering redness
Inhalation	: No specific data.
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Ingestion	: Adverse symptoms may include the following: stomach pains
Indication of immediate med	ical attention and special treatment needed, if necessary
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.
Protection of first-aiders	: No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

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 : None known.

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media

Section 5. Firefighting measures

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Specific hazards arising from the chemical	: 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
Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident 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, protect	ve 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".
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.
Methods and material for cont	ainment and cleaning up
Small spill	: Move containers from spill area. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Place spilled material in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.
Large spill	: Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Avoid dust generation. Do not dry sweep. Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling : 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 7. Handling and storage

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Section 8. Exposure controls/personal protection

		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,
		There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals.
		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.
Hand protection	:	Chemical-resistant, impervious gloves complying with an approved standard should
Skin protection		instead.
Eye/face protection	:	Safety eyewear complying to EN 166 should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/ or face shield. If inhalation hazards exist, a full-face respirator may be required
		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.
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.
Individual protection measures		
controls		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.
Environmental exposure	:	exposure to airborne contaminants below any recommended or statutory limits. Emissions from ventilation or work process equipment should be checked to ensure
Appropriate engineering controls	;	If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker
Recommended monitoring procedures	:	If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.
Dust Limit : 10 mg/m³ (TWA o	of to	otal inhalable dust) and 4 mg/m³ (TWA of respirable)
Occupational exposure limits		
Control parameters		

Section 8. Exposure controls/personal protection

	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 EN374. May be used, gloves(breakthrough time) 4 - 8 hours: nitrile rubber, neoprene, polyvinyl alcohol (PVA)
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.
	If workers are exposed to concentrations above the exposure limit, they must use a respirator according to EN 140. If dust is generated and ventilation is inadequate, use respirator that will protect against dust/mist. (FFP2 / N95).

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	:	Solid. Powder.
Colour	:	Various
Odour	:	Odourless.
Odour threshold	1	Not available.
рН	1	Not applicable.
Melting point	1	Not applicable.
Boiling point	:	Not applicable.
Flash point	:	Closed cup: Not applicable.
Burning time	:	Not available.
Burning rate	:	Not available.
Evaporation rate	:	Not applicable.
Flammability (solid, gas)	:	Not applicable.
Lower explosion limit	1	30 g/m³
Minimum ignition energy (mJ)	;	10 - 30
Vapour pressure	:	Not applicable.
Vapour density	:	Not available.
Relative density	:	1.2 to 1.9 g/cm ³
Solubility	:	Insoluble in the following materials: cold water and hot water.
Partition coefficient: n-octanol/ water	:	Not applicable.
Auto-ignition temperature	1	> 400°C
Decomposition temperature	:	>230°C (>446°F)
SADT	:	Not available.
Viscosity	:	Not applicable.
Aerosol product		

Section 10. Stability and reactivity

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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	: Not applicable.
Hazardous decomposition products	 Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Fine dust clouds may form explosive mixtures with air.

Section 11. Toxicological information

Information on toxicological effects Acute toxicity

<u>riodic toxioity</u>				
Product/ingredient name	Result	Species	Dose	Exposure
1,3,5-tris(oxiranylmethyl) -1,3,5-triazine-2,4,6(1h,3h, 5h)-trione	LD50 Oral	Rat	138 mg/kg	-
zinc di(benzothiazol-2-yl) disulphide	LD50 Oral	Rat	540 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
1,3,5-tris(oxiranylmethyl) -1,3,5-triazine-2,4,6(1h,3h, 5h)-trione	Eyes - Severe irritant Eyes - Irritant	Rabbit Mammal - species unspecified	-	100 milligrams -	-

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
1,3,5-tris(oxiranylmethyl) -1,3,5-triazine-2,4,6(1h,3h, 5h)-trione	skin	Mammal - species unspecified	Sensitising
zinc di(benzothiazol-2-yl) disulphide	skin	Mammal - species unspecified	Sensitising

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Not available.

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1h,3h,5h)- trione	Category 2	Not determined	Not determined

Section 11. Toxicological information

Aspiration hazard

Not available.

Potential acute health	<u>effects</u>
Eye contact	: Causes serious eye damage.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: May cause an allergic skin reaction.
Ingestion	: Harmful if swallowed.
Symptoms related to t	he physical, chemical and toxicological characteristics
Inhalation	: No specific data.
Ingestion	: Adverse symptoms may include the following: stomach pains
Skin contact	: Adverse symptoms may include the following: pain or irritation redness blistering may occur
Eye contact	: Adverse symptoms may include the following: pain watering redness
Potential chronic hea	Ith effects
General	: Once sensitized, a severe allergic reaction may occur when subsequently exposed

C			to very low levels.
С	arcinogenicity	:	No known significant effects or critical hazards.
Ν	lutagenicity	:	May cause genetic defects.
Т	eratogenicity	:	No known significant effects or critical hazards.
D	evelopmental effects	:	No known significant effects or critical hazards.
F	ertility effects	:	No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates		
Route	ATE value	
Oral Inhalation (vapours)	1831.12 mg/kg 54.93 mg/l	

Section 12. Ecological information

Toxicity

Not available.

Persistence and degradability

Not available.

Bioaccumulative potential

Jotun Facade 1407 (B001)				
Section 12. Ecological information				
Product/ingredient name	LogPow	BCF	Potential	
1,3,5-tris(oxiranylmethyl) -1,3,5-triazine-2,4,6(1h,3h, 5h)-trione zinc di(benzothiazol-2-yl)	-0.8 5.02	- <8	low	
disulphide				

Mobility in soil

: Not available.

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Other adverse effects
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Soil/water partition

coefficient (Koc)

: No known significant effects or critical hazards.

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 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 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and

	UN	IMDG	IATA Not regulated.	
UN number	Not regulated.	Not regulated.		
UN proper shipping name	-	-	-	
Transport hazard class(es)	-	-	-	
Packing group	-	-	-	
Environmental hazards	No.	No.	No.	
Special precautions for user	Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.	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.	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.	
Additional information	-	-	-	

Transport in bulk according to : Not available. Annex II of Marpol and the IBC Code

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Section 14. Transport information

ADR / RID

Section 15. Regulatory information

Hazardous Substance Act B.E. 2535 (1992)

<u>Type</u>

Ingredient name

<u>Type</u>

<u>Authority</u>

Conditions

No known specific national and/or regional regulations applicable to this product (including its ingredients).

Section 16. Other information

<u>History</u>				
Date of printing	:	21.08.2020		
Date of issue/Date of revision	:	21.08.2020		
Date of previous issue	:	21.08.2020		
Version	:	1.09		
Key to abbreviations		ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Internediate Bulk Container IMDG = International Maritime Dangerous Goods MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution) RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail UN = United Nations LogPow = logarithm of the octanol/water partition coefficient		
References	1	Not available.		
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✓ 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.