SAFETY DATA SHEET



Jotun Thinner No. 10

Section 1. Identi	fication
GHS product identifier	: Jotun Thinner No. 10
Other means of identification	: Not available.
Product code	: 549
Product description	: Solvent.
Product type	: Liquid.
Relevant identified uses o	f the substance or mixture and uses advised against
Identified uses	
Use in coatings - Industrial Use in coatings - Professio Use in coatings - Consume	
Supplier's details	: Jotun (Singapore) Pte Ltd 37 Tuas View Crescent Singapore 637236 Phone: 6508 8288 Fax: 6265 7484 SDSJotun@jotun.com
Emergency telephone number	: Jotun (Singapore) Pte Ltd, Tel: 6508 8288

Section 2. Hazards identification

Classification of the substance or mixture	 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 SKIN CORROSION/IRRITATION - Category 2 SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2 ASPIRATION HAZARD - Category 1 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
GHS label elements	
Hazard pictograms	
Signal word	: Danger.
Hazard statements	 H226 - Flammable liquid and vapour. H304 - May be fatal if swallowed and enters airways. H312 - Harmful in contact with skin. H315 - Causes skin irritation. H319 - Causes serious eye irritation. H335 - May cause respiratory irritation. H373 - May cause damage to organs through prolonged or repeated exposure. (hearing organs) H412 - Harmful to aquatic life with long lasting effects.
Precautionary statements	

Date	of issue	
Dute	01 13346	

Section 2. Hazards identification

General	2102 - Keep out of reach of children.	
Prevention	 2280 - Wear protective gloves and protective clothing. Wear eye or face protec 2210 - Keep away from heat, hot surfaces, sparks, open flames and other ignitiources. No smoking. 2271 - Use only outdoors or in a well-ventilated area. 2273 - Avoid release to the environment. 2260 - Do not breathe vapour or spray. 2264 - Wash hands thoroughly after handling. 	
Response	 2304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwer 2301 + P310, P331 - IF SWALLOWED: Immediately call a POISON CENTER of octor. Do NOT induce vomiting. 2362 + P364 - Take off contaminated clothing and wash it before reuse. 2302 + P312 - IF ON SKIN: Call a POISON CENTER or doctor if you feel unwer 2305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minute 2307 + P313 - If eye irritation persists: Get medical advice or attention. 	or ell.
Storage	2405 - Store locked up. 2403 + P233 - Store in a well-ventilated place. Keep container tightly closed. 2403 + P235 - Keep cool.	
Disposal	2501 - Dispose of contents and container in accordance with all local, regional, ational and international regulations.	
ther hazards which do not	lone known.	

result in classification

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture		
Other means of identification	: Not available.		
CAS number/other ident	<u>lifiers</u>		
CAS number	: Not applicable.		
EC number	: Mixture.		
Product code	: 549		
Ingredient name		%	CAS number
xylene ethylbenzene n-butyl acetate		≥50 - ≤72 ≥10 - ≤24 ≥10 - <20	1330-20-7 100-41-4 123-86-4

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.

Chemical formula : Not applicable.

Section 4. First aid measures

Description of necessary	<u>y first aid measures</u>
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.

Section 4. First aid measures

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. If necessary, call a poison center or physician. 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. 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. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. 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/	ts, acute and delayed	
Potential acute health effe		
Eye contact	Causes serious eye irritation.	
Inhalation	May cause respiratory irritation.	
Skin contact	Harmful in contact with skin. Causes skin irritation.	
Ingestion	May be fatal if swallowed and enters airways.	
<u>Over-exposure signs/sym</u>	<u>15</u>	
Eye contact	Adverse symptoms may include the following: pain or irritation watering redness	
Inhalation	Adverse symptoms may include the following: respiratory tract irritation coughing	
Skin contact	Adverse symptoms may include the following: irritation redness	
Ingestion	Adverse symptoms may include the following: nausea or vomiting	
Indication of immediate me	l attention and special treatment needed, if necessary	
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	No specific treatment.	
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training. 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.	ie n

See toxicological information (Section 11)

Section 5. Firefighting measures

Extinguishing media	
Suitable extinguishing media	: Use dry chemical, CO ₂ , water spray (fog) or foam.
Unsuitable extinguishing media	: Do not use water jet.
Specific hazards arising from the chemical	: 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. 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.
Hazardous thermal decomposition products	: Decomposition products may include the following materials: carbon dioxide carbon monoxide

Section 5. Firefighting measures

Special protective actions for fire-fighters	: Promptly isolate the scene by removing all persons from the vicinity of the incident i 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.
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	tiv	e 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".
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 con	tai	nment 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 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 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures	: Put on appropriate personal protective equipment (see Section 8). Do not breathe vapour or mist. Do not swallow. Avoid contact with eyes, skin and clothing. Avoid release to the environment. 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.
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 7. Handling and storage

before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exp	osure limits
xylene	(Sin PE PE PE	rkplace Safety and Health Act gapore, 2/2006). L (short term): 651 mg/m ³ 15 minutes. L (short term): 150 ppm 15 minutes. L (long term): 434 mg/m ³ 8 hours. L (long term): 100 ppm 8 hours.
ethylbenzene	Wor (Sin PE PE Wor (Sin PE	kplace Safety and Health Act gapore, 2/2006). Notes:L (long term): 100 ppm 8 hours.L (long term): 434 mg/m³ 8 hours.Kplace Safety and Health Act gapore, 2/2006).L (short term): 543 mg/m³ 15 minutes.
		L (short term): 125 ppm 15 minutes.
n-butyl acetate	(Sin PE PE PE	kplace Safety and Health Actgapore, 2/2006).L (short term): 950 mg/m³ 15 minutes.L (short term): 200 ppm 15 minutes.L (long term): 713 mg/m³ 8 hours.L (long term): 150 ppm 8 hours.
Appropriate engineering controls	: Use only with adequate ventilation. Use pr ventilation or other engineering controls to contaminants below any recommended or also need to keep gas, vapour or dust con- limits. Use explosion-proof ventilation equ	keep worker exposure to airborne statutory limits. The engineering controls centrations below any lower explosive
Environmental exposure controls	: Emissions from ventilation or work process they comply with the requirements of envir cases, fume scrubbers, filters or engineerin equipment will be necessary to reduce emi	onmental protection legislation. In some ng modifications to the process
ndividual protection measu	res	
Hygiene measures	: Wash hands, forearms and face thoroughl eating, smoking and using the lavatory and Appropriate techniques should be used to Wash contaminated clothing before reusin safety showers are close to the workstation	at the end of the working period. remove potentially contaminated clothing. g. Ensure that eyewash stations and
Eye/face protection	: Safety eyewear complying to EN 166 shou indicates this is necessary to avoid exposu dusts. If contact is possible, the following assessment indicates a higher degree of p	d be used when a risk assessment re to liquid splashes, mists, gases or protection should be worn, unless the
Skin protection		

Section 8. Exposure controls/personal protection

Hand protection	 There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. The breakthrough time must be greater than the end use time of the product. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical/ chemical damage and poor maintenance. Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. Wear suitable gloves tested to EN374. Recommended, gloves(breakthrough time) < 8 hours: Teflon, polyvinyl alcohol (PVA), 4H May be used, gloves(breakthrough time) 4 - 8 hours: butyl rubber, nitrile rubber Not recommended, gloves (breakthrough time) < 1 hour: neoprene, PVC, Viton®, PE 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.
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.

Section 9. Physical and chemical properties

<u>Appearance</u>		
Physical state	_iquid.	
Colour	Clear.	
Odour	Characteristic.	
Odour threshold	Not available.	
рН	Not applicable.	
Melting point	Not applicable.	
Boiling point	Lowest known value: 126°C (258.8°F) (n-butyl acetate). Weighted average: 135.13°C (275.2°F)	
Flash point	Closed cup: 27°C (80.6°F)	
Burning time	Not applicable.	
Burning rate	Not applicable.	
Evaporation rate	Highest known value: 1 (n-butyl acetate) Weighted average: 0.81compared v putyl acetate	with
Flammability (solid, gas)	Not applicable.	
Lower and upper explosive (flammable) limits	0.8 - 7.6%	
Vapour pressure	Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Wei average: 1.03 kPa (7.73 mm Hg) (at 20°C)	ghted
Vapour density	Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.73	(Air =
Date of issue	: 23.11.2022	6/10

Section 9. Physical and chemical properties

Relative density	1	0.871 g/cm³
Solubility	1	Insoluble in the following materials: cold water and hot water.
Solubility in water	1	Not available.
Partition coefficient: n- octanol/water	:	Not available.
Auto-ignition temperature	1	Lowest known value: 415°C (779°F) (n-butyl acetate).
Decomposition temperature	1	Not available.
SADT	1	Not available.
Viscosity	:	Dynamic: Highest known value: 0.58 cP (xylene) Kinematic: Highest known value: 0.83 cSt (n-butyl acetate) (OECD 114) Weighted average: 0.79 cSt Kinematic (40C): <20.5 cSt

Section 10. Stability and reactivity

Reactivity	No specific test data related to reactivity available for this product or its ingredi	ients.
Chemical stability	The product is stable.	
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occu	ur.
Conditions to avoid	Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, braze, solder, drill, grind or expose containers to heat or sources of ignition.	weld,
Incompatible materials	Keep away from the following materials to prevent strong exothermic reactions oxidising agents, strong alkalis, strong acids.	S:
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition produces should not be produced.	cts
SADT	Not available.	

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Vapour	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Vapour	Rat - Male	17.8 mg/l	4 hours
-	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
-	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	13100 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rat	-	87 milligrams 8 hours 60 microliters	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Section 11. Toxicological information

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name			Category		Route of exposure	Target organs	5
xylene			Category 3		-	Respiratory tra irritation	ct
n-butyl acetate			Category 3		-	Narcotic effects	s
Specific target organ toxicit	ty (repeated exposure)					
Name			Category		Route of exposure	Target organs	\$
ethylbenzene			Category 2		-	hearing organs	\$
Aspiration hazard							
Name				Res	ult		
xylene ethylbenzene						RD - Category 1 RD - Category 1	
nformation on likely routes f exposure	:	Not available.					
otential acute health effects	5						
Eye contact		Causes serious eye irritati	on.				
Inhalation		May cause respiratory irrit					
Skin contact		Harmful in contact with sk		kin irr	itation.		
Ingestion	:	May be fatal if swallowed a	and enters ai	ways			
symptoms related to the phy		-		-			
Eye contact	:	Adverse symptoms may ir pain or irritation watering redness	nclude the fol	owing	j:		
Inhalation	:	Adverse symptoms may ir respiratory tract irritation coughing	nclude the fol	owing	j :		
Skin contact	:	Adverse symptoms may ir irritation redness	nclude the fol	owing	j:		
Ingestion	:	Adverse symptoms may include the following: nausea or vomiting					
elayed and immediate effec	ts	as well as chronic effects	from short	and le	ong-term expos	<u>sure</u>	
<u>Short term exposure</u>							
Potential immediate effects	1	Not available.					
Potential delayed effects	1	Not available.					
<u>Long term exposure</u>							
Potential immediate effects	:	Not available.					
Potential delayed effects	:	Not available.					
Potential chronic health effe	ect	<u>s</u>					
Not available.							
General	:	May cause damage to org	ans through	prolor	iged or repeated	l exposure.	
Carcinogenicity	:	No known significant effect	ts or critical h	nazaro	ds.		
Mutagenicity		No known significant effect					
Teratogenicity		No known significant effect					
Developmental effects		No known significant effect					

Section 11. Toxicological information

Fertility effects

: No known significant effects or critical hazards.

Numerical measures of toxicity Acute toxicity estimates

ACU	le	LU	λιι	<i>,</i> (1)	
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Route	ATE value
Dermal	1629.63 mg/kg
Inhalation (vapours)	21.56 mg/l

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure		
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours		
ethylbenzene	Acute LC50 13400 μg/l Fresh water Acute EC50 7700 μg/l Marine water Acute EC50 2.93 mg/l Acute LC50 4.2 mg/l	Fish - Pimephales promelas Algae - Skeletonema costatum Daphnia Fish	96 hours 96 hours 48 hours 96 hours		

Persistence/degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene ethylbenzene	-	-	Readily Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
ethylbenzene	3.6	-	low
n-butyl acetate	2.3	-	low

Mobility in soil

Soil/water	partition
coefficient	(Koc)

Other adverse effects

: Not available.

: 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 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 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.

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste.

Section 14. Transport information

	UN	IMDG	IATA
UN number	UN1263	UN1263	UN1263
UN proper shipping name	Paint related material	Paint related material	Paint related material
Transport hazard class(es)	3	3	3
Packing group			111
Environmental hazards	No.	No.	No.
Additional information	-	Emergency schedules F-E, S-E	-

Additional information

Transport in accordance with ADR/RID, IMDG/IMO and ICAO/IATA and national regulation.

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ADR / RID	1	Tunnel restriction code: (D/E) Hazard identification number: 30
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 in bulk according to IMO instruments	1	Not available.

Section 15. Regulatory information

Singapore - hazardous chemicals under government control

None.

Section 16. Other information

Key to abbreviations	: ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association
	IBC = International All 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) UN = United Nations
References	· Not available

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.