SAFETY DATA SHEET



Jotatemp 1000 Comp A

GHS product identifier	: Jotatemp 1000 Comp A
Other means of identification	: Not available.
Product code	: 48342
Product description	: Paint.
Product type	: Liquid.

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

	entified uses
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	1	Jotun Thailand Limited
		Phone: + 66 2 022 9888 ext. 2100, 2400, 2402

Section 2. Hazards identification

Data dia ma	
Disposal	: P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.
Storage	: P403 + P235 - Store in a well-ventilated place. Keep cool.
Response	: P391 - Collect spillage.
Prevention	 P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P273 - Avoid release to the environment.
Precautionary statements	
Hazard statements	 H226 - Flammable liquid and vapour. H316 - Causes mild skin irritation. H411 - Toxic to aquatic life with long lasting effects.
Signal word	: Warning.
Hazard pictograms	
GHS label elements	
Classification of the substance or mixture	: FLAMMABLE LIQUIDS - Category 3 SKIN CORROSION/IRRITATION - Category 3 SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 2 LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2

Date of issue	: 29.03.2023	1/10
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Section 2. Hazards identification

Other hazards which do not : None known. result in classification

Section 3. Composition/information on ingredients

Substance/mixture	: Mixture
Other means of identification	: Not available.
CAS number/other identifiers	
CAS number	: Not applicable.
EC number	: Mixture.
Product code	: 48342

Ingredient name	%	CAS number	
trizinc bis(orthophosphate)	≥10 - <25	7779-90-0	
xylene	<7.5	1330-20-7	
ethylbenzene	≤3	100-41-4	
2-butoxyethanol	<2.5	111-76-2	

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

Ingestion

Date of issue

Description of necessary first a	id I	neasures
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. If irritation persists, 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	:	Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention if adverse health effects persist or are severe. 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 adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
Most important symptoms/effe	<u>cts</u>	acute and delayed
Potential acute health effects		
Eye contact	1	No known significant effects or critical hazards.
Inhalation	1	No known significant effects or critical hazards.
Skin contact	1	Causes mild skin irritation.

: No known significant effects or critical hazards.

: 29.03.2023

Section 4. First aid measures

Over-exposure signs/symptor	ns	
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.
Indication of immediate medica	l a	ttention 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. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Firefighting measures		
Extinguishing media Suitable extinguishing media Unsuitable extinguishing media		Use dry chemical, CO ₂ , water spray (fog) or foam. 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 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 phosphorus oxides halogenated compounds metal oxide/oxides
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.
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, 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".

Section 6. Accidental release measures

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 conta	ainn	nent 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 spill product. 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. Any gas developed during storage will remain in the container when the temperature
		is decreased. To avoid splash of paint/thinner when opening the containers release pressure by making a small hole in the plastic seal in the center of the lid.
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. 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.

Section 8. Exposure controls/personal protection

<u>Control parameters</u> Occupational exposure limits

Ingredient name	Exposure limits		
xylene	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.		
ethylbenzene	Ministry of Labor (Thailand, 8/2017). TWA: 100 ppm 8 hours.		
2-butoxyethanol	Ministry of Labor (Thailand, 8/2017). TWA: 50 ppm 8 hours.		
procedures nationa	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.		

Section 8. Exposure controls/personal protection

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 control also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.
Environmental exposure controls	: Emissions from ventilation or work process equipment should be checked to ensur 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 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	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicate 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.
	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/chemic
	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: fluor rubber (> 0.35 mm), Teflon (> 0.35 mm), butyl rubber (> 0.4 mm), Viton® (> 0.7 mm), 4H/Silver Shield® (> 0.07 mm), nitrile rubber (> 0.4 mm), polyvinyl alcohol (PVA) (> 0.3 mm) May be used, gloves(breakthrough time) 4 - 8 hours: neoprene (> 0.35 mm), PVC (0.5 mm)
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 importan aspects of use.
Date of issue	: 29.03.2023 5/1

Section 8. Exposure controls/personal protection

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

Appearance		
Physical state	quid.	
Colour	ey, Aluminium	
Odour	naracteristic.	
Odour threshold	ot available.	
рН	ot applicable.	
Melting point	ot applicable.	
Boiling point	west known value: 136.1°C (277°F) (ethylbenzene). Weighted ave 13.6°F)	ərage: 156.47°C
Flash point	osed cup: 27°C (80.6°F)	
Burning time	ot applicable.	
Burning rate	ot applicable.	
Evaporation rate	ghest known value: 0.84 (ethylbenzene) Weighted average: 0.47c ityl acetate	compared with
Flammability (solid, gas)	ot applicable.	
Lower and upper explosive (flammable) limits	8 - 14%	
Vapour pressure	ghest known value: 1.2 kPa (9.3 mm Hg) (at 20°C) (ethylbenzene) erage: 0.8 kPa (6 mm Hg) (at 20°C)	. Weighted
Vapour density	ghest known value: 5.1 (Air = 1) (dipropylene glycol methyl ether) erage: 4.16 (Air = 1)). Weighted
Relative density	762 to 1.785 g/cm³	
Solubility	soluble in the following materials: cold water and hot water.	
Partition coefficient: n-octanol/ water	ot available.	
Auto-ignition temperature	west known value: 207°C (404.6°F) (dipropylene glycol methyl eth	ier).
Decomposition temperature	ot available.	
SADT	ot available.	
Viscosity	nematic (40°C): >20.5 mm²/s (>20.5 cSt)	
Aerosol product		

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	: 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.		
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. 		

Date of issue	: 29.03.2023

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	-
2-butoxyethanol	LD50 Oral	Guinea pig -	1414 mg/kg	-
-		Male, Female		
	LD50 Oral	Rat - Male,	1300 mg/kg	-
		Female		

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant Skin - Mild irritant	Rabbit Rat	-	87 milligrams 8 hours 60	-
2-butoxyethanol	Eyes - Moderate irritant	Rabbit	-	microliters 24 hours 100	-
	Skin - Mild irritant	Rabbit	-	mg 500 mg	-

Sensitisation

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
xylene	Category 3	-	Respiratory tract irritation
Specific target organ toxicity (repeated exposu	<u>ire)</u>		
Name	Category	Route of exposure	Target organs
ethylbenzene	Category 2	-	hearing organs

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Potential acute health effects

Eye contact	: No known significant effects or critical hazards.
Inhalation	: No known significant effects or critical hazards.
Skin contact	: Causes mild skin irritation.
Ingestion	: No known significant effects or critical hazards.

Date of issue : 29 03 2023 7/	/10
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Section 11. Toxicological information

al,	chemical and toxicological characteristics
:	No specific data.
÷	No specific data.
:	Adverse symptoms may include the following: irritation redness
:	Adverse symptoms may include the following: pain or irritation watering redness
	:

Potential chronic health effe	<u>cts</u>
General	: No known significant effects or critical hazards.
Carcinogenicity	: No known significant effects or critical hazards.
Mutagenicity	: No known significant effects or critical hazards.
Teratogenicity	: No known significant effects or critical hazards.
Developmental effects	: No known significant effects or critical hazards.
Fertility effects	: No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Dermal	52401.75 mg/kg 16011.64 mg/kg 80.94 mg/l

Section 12. Ecological information

Т	ox	С	ty
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Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute LC50 0.14 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.1 mg/l	Micro-organism	4 hours
xylene	Acute LC50 8500 µg/l Marine water	Crustaceans - Palaemonetes	48 hours
	Acute LC50 13400 µg/l Fresh water	Fish - Pimephales promelas	96 hours
ethylbenzene	Acute EC50 7700 µg/l Marine water	Algae - Skeletonema costatum	96 hours
	Acute EC50 2.93 mg/l	Daphnia	48 hours
	Acute LC50 4.2 mg/l	Fish	96 hours
2-butoxyethanol	Acute EC50 1000 mg/l Fresh water	Daphnia - Daphnia magna	48 hours
2	Acute LC50 1000 mg/l Marine water	Crustaceans -	48 hours
	3	Chaetogammarus marinus -	
		Young	

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
trizinc bis(orthophosphate) xylene	-		Not readily Readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Jotatemp	1000	Comp A
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Section 12. Ecological information

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Product/ingredient name	LogPow	BCF	Potential
trizinc bis(orthophosphate) xylene			high Iow
ethylbenzene 2-butoxyethanol	3.6 0.81		low low

Mobility in soil Soil/water partition coefficient (K _{oc})	: Not available.	
Other adverse effects	: No known significant e	

s : No known significant effects or critical hazards.

Section 13. Disposal considerations

: The generation of waste should be avoided or minimised wherever possible. **Disposal methods** 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 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				
	UN	IMDG	ΙΑΤΑ	
UN number	UN1263	UN1263	UN1263	
UN proper shipping name	Paint	Paint. Marine pollutant (trizinc bis(orthophosphate))	Paint	
Transport hazard class(es)	3		3	
Packing group	Ш	Ш	Ш	
Environmental hazards	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes. The environmentally hazardous substance mark is not required.	
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.	
Date of issue : 29.03.2023 9/10				

Jotatemp 1000 Comp A						
Section 14. Transport information						
Additional information	-	not required when transported in sizes of ≤ 5 L or ≤ 5 kg.	The environmentally hazardous substance mark may appear if required by other transportation regulations.			

Transport in bulk according to IMO instruments	:	Not available.
ADR / RID	:	Tunnel restriction

: Tunnel restriction code: (D/E) Hazard identification number: 30

Section 15. Regulatory information

Hazardous Substance Act B.E. 2535 (1992)

<u>Type</u>

Ingredient name lead

<u>Type</u> 3 Authority Department of Industrial Works **Conditions**

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

Section 16. Other information			
History			
Date of printing	:	29.03.2023	
Date of issue/Date of revision	:	29.03.2023	
Date of previous issue	:	29.03.2023	
Version	:	1.03	
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	:	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.