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

1.1 Product identifier

Product name : Jotatemp 650

Product code : 9240
Product description : Paint.
Product type : Liquid.
Other means of : Not available.

identification

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

Identified uses

Uses in Coatings - Professional use

1.3 Details of the supplier of the safety data sheet

Jotun UAE Ltd. L.L.C. P.O.Box 3671, Dubai, U.A.E. Tel: 009714 3395000 Fax:009714 3380666

Jotun Abu Dhabi L.L.C.

P.O.box-3714 Abu Dhabi U.A.E. Tel: 00971 2 5510300 Fax:00971 2 5510232

SDSJotun@jotun.com

1.4 Emergency telephone number

SHE Dept. Jotun AS, Norway +47 33 45 70 00

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition: Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225 Asp. Tox. 1, H304 Aquatic Chronic 3, H412

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : F; R11 Xn; R65

R52/53

Physical/chemical

hazards

: Highly flammable.

Human health hazards : Harmful: may cause lung damage if swallowed.

Date of issue : 16.06.2017 1/14

SECTION 2: Hazards identification

Environmental hazards : Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic

environment.

See Section 16 for the full text of the R phrases or H statements declared above. See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Hazard pictograms





Signal word : Danger.

Hazard statements: Highly flammable liquid and vapour.

May be fatal if swallowed and enters airways. Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.

No smoking. Keep container tightly closed. Avoid release to the environment.

Response : IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT

induce vomiting.

Storage : Store in a well-ventilated place. Keep cool.

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

and international regulations.

Supplemental label

elements

: Not applicable.

2.3 Other hazards

Other hazards which do not result in classification

: None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

			Classif	<u>ication</u>		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре	Notes
Solvent naphtha (petroleum), heavy arom.	REACH #: 01-2119463583-34 EC: 265-198-5 CAS: 64742-94-5	≥10 - ≤18	Xn; R65 R66, R67 N; R51/53	STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]	Н
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤5	R10 Xn; R20/21 Xi; R38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]	С
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	F; R11 Xn; R20, R48/20, R65	Flam. Liq. 2, H225	[1] [2]	-
toluene	REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤1,6	F; R11 Repr. Cat. 3; R63 Xn; R48/20, R65 Xi; R38 R67	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d (Unborn child) STOT SE 3, H336 STOT RE 2, H373	[1] [2]	4

Date of issue : 16.06.2017 **2/14**

•						
SECTION 3: Composition/information on ingredients						
naphthalene	REACH #: 01-2119463583-34 EC: 202-049-5 CAS: 91-20-3 Index: 601-052-00-2	≤0,18	Carc. Cat. 3; R40 Xn; R22 N; R50/53	Asp. Tox. 1, H304 Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [2]	-
			See Section 16 for the full text of the R- phrases declared above.	See Section 16 for the full text of the H statements declared above.		

There are no additional ingredients present which, within the current knowledge of the supplier, are classified and contribute to the classification of the substance and hence require reporting in this section.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

<u>Type</u>

Jotatemp 650

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit
- [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
- [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
- [5] Substance of equivalent concern

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General : In all cases of doubt, or when symptoms persist, seek medical attention. Never give

anything by mouth to an unconscious person. If unconscious, place in recovery

position and seek medical advice.

Inhalation : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is

irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by

trained personnel.

Skin contact: Remove contaminated clothing and shoes. Wash skin thoroughly with soap and

water or use recognised skin cleanser. Do NOT use solvents or thinners.

Eye contact: Remove contact lenses, irrigate copiously with clean, fresh water, holding the

eyelids apart for at least 10 minutes and seek immediate medical advice.

Ingestion: If swallowed, seek medical advice immediately and show the container or label.

Keep person warm and at rest. Do NOT induce vomiting.

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.

4.2 Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 Ingestion
 No known significant effects or critical hazards.
 Ingestion
 May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

Eye contact : No specific data.

Inhalation : No specific data.

Skin contact : No specific data.

Ingestion : Adverse symptoms may include the following:

nausea or vomiting

4.3 Indication of any immediate medical attention and special treatment needed

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

quantities have been ingested or inhaled.

Date of issue : 16.06.2017 3/14

SECTION 4: First aid measures

Specific treatments: No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

: Recommended: alcohol-resistant foam, CO₂, powders, water spray.

Unsuitable extinguishing media

: Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

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

5.3 Advice for firefighters

Special protective actions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

6.3 Methods and material for containment and cleaning up

Small spill

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

Date of issue : 16.06.2017 4/14

SECTION 6: Accidental release measures

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. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections

See Section 1 for emergency contact information.
 See Section 8 for information on appropriate personal protective equipment.
 See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Prevent the creation of flammable or explosive concentrations of vapours in air and avoid vapour concentrations higher than the occupational exposure limits.

In addition, the product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard.

Mixture may charge electrostatically: always use earthing leads when transferring from one container to another.

Operators should wear antistatic footwear and clothing and floors should be of the conducting type.

Keep away from heat, sparks and flame. No sparking tools should be used.

Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Avoid inhalation of dust from sanding.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Put on appropriate personal protective equipment (see Section 8).

Never use pressure to empty. Container is not a pressure vessel.

Always keep in containers made from the same material as the original one.

Comply with the health and safety at work laws.

Do not allow to enter drains or watercourses.

Information on fire and explosion protection

Vapours are heavier than air and may spread along floors. Vapours may form explosive mixtures with air.

When operators, whether spraying or not, have to work inside the spray booth, ventilation is unlikely to be sufficient to control particulates and solvent vapour in all cases. In such circumstances they should wear a compressed air-fed respirator during the spraying process and until such time as the particulates and solvent vapour concentration has fallen below the exposure limits.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidising agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight. Keep away from sources of ignition. No smoking. Prevent unauthorised access. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

Date of issue : 16.06.2017 5/14

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
xylene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values STEL: 442 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes. TWA: 221 mg/m³ 8 hours. TWA: 50 ppm 8 hours.
ethylbenzene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 442 mg/m³ 8 hours. STEL: 200 ppm 15 minutes. STEL: 884 mg/m³ 15 minutes.
toluene	EU OEL (Europe, 12/2009). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 192 mg/m³ 8 hours. TWA: 50 ppm 8 hours. STEL: 384 mg/m³ 15 minutes. STEL: 100 ppm 15 minutes.
naphthalene	EU OEL (Europe, 12/2009). Notes: list of indicative occupational exposure limit values TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.

procedures

Recommended monitoring: 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 monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

Derived no effect levels

Type	Exposure	Value	Population	Effects
DNEL	Short term Inhalation	289 mg/m³	Workers	Systemic
DNEL	Short term Inhalation	289 mg/m ³	Workers	Local
DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
DNEL	Long term Dermal	108 mg/kg bw/day	Consumers	Systemic
DNEL	Long term Inhalation	14,8 mg/m³	Consumers	Systemic
DNEL	Long term Oral	1,6 mg/kg bw/day	Consumers	Systemic
DNEL	Short term Inhalation	293 mg/m³	Workers	Local
DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
DNEL	Long term Inhalation	15 mg/m³	Consumers	Systemic
	DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL	DNEL Short term Inhalation Short term Inhalation DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Dermal DNEL Long term Oral DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term DNEL Long term Inhalation DNEL Long term Inhalation DNEL Long term	DNEL Short term Inhalation DNEL Short term 289 mg/m³ Inhalation DNEL Long term Dermal 180 mg/kg bw/day DNEL Long term Dermal 108 mg/kg bw/day DNEL Long term Dermal 108 mg/kg bw/day DNEL Long term 14,8 mg/m³ Inhalation DNEL Short term 1,6 mg/kg bw/day DNEL Short term 293 mg/m³ Inhalation DNEL Long term Dermal 180 mg/kg bw/day DNEL Long term Dermal 180 mg/kg bw/day DNEL Long term Dermal 180 mg/kg bw/day DNEL Long term 15 mg/m³	DNEL Short term

Date of issue : 16.06.2017 6/14

SECTION 8: Exposure controls/personal protection

DNEL	Long term Oral	1,6 mg/kg	Consumers	Systemic
		bw/day		

Predicted no effect concentrations

Product/ingredient name	Type	Compartment Detail	Value	Method Detail
xylene	PNEC	Fresh water	0,327 mg/l	-
	PNEC	Marine	0,327 mg/l	-
	PNEC	Sewage Treatment Plant	6,58 mg/l	-
	PNEC	Fresh water sediment	12,46 mg/kg dwt	-
	PNEC	Marine water sediment	12,46 mg/kg dwt	-
	PNEC	Soil	2,31 mg/kg dwt	-
ethylbenzene	PNEC	Fresh water	0,1 mg/l	-
	PNEC	Marine	0,01 mg/l	-
	PNEC	Sewage Treatment Plant	9,6 mg/l	-
	PNEC	Fresh water sediment	13,7 mg/kg dwt	-
	PNEC	Soil	2,68 mg/kg dwt	-
	PNEC	Secondary Poisoning	20 mg/kg	-
toluene	PNEC	Fresh water	0,68 mg/l	-
	PNEC	Marine	0,68 mg/l	-
	PNEC	Sewage Treatment Plant	13,61 mg/l	-
	PNEC	Fresh water sediment	16,39 mg/kg dwt	-
	PNEC	Marine water sediment	16,39 mg/kg dwt	-
	PNEC	Soil	2,89 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying to 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: safety glasses with sideshields.

Skin 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.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber Not recommended, gloves(breakthrough time) < 1 hour: PVC

Recommended, gloves(breakthrough time) > 8 hours: fluor rubber, Viton®, 4H,

Teflon, polyvinyl alcohol (PVA), nitrile rubber

Date of issue : 16.06.2017 **7/14**

SECTION 8: Exposure controls/personal protection

For right choice of glove materials, with focus on chemical resistance and time of penetration, seek advice by the supplier of chemical resistant gloves.

The user must check that the final choice of type of glove selected for handling this product is the most appropriate and takes into account the particular conditions of

use, as included in the user's risk assessment.

Body protection

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection

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.

Environmental exposure controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state : Liquid. Colour : Grey. Black. Odour : Aromatic. **Odour threshold** : Not available. pН : Not applicable. **Melting point/freezing point** : Not applicable.

Initial boiling point and

boiling range

: >90°C

: Closed cup: 18°C Flash point

Highest known value: 3.22 (dimethyl carbonate) Weighted average: 1. **Evaporation rate**

94compared with butyl acetate

Flammability (solid, gas) : Not applicable.

Burning time : Not applicable. **Burning rate** : Not applicable.

Upper/lower flammability or

explosive limits

: 1.2 - 8%

: Highest known value: 7.6 kPa (56.8 mm Hg) (at 20°C) (dimethyl carbonate). Vapour pressure

Weighted average: 1.84 kPa (13.8 mm Hg) (at 20°C)

: Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.39 (Air = 1) Vapour density

Relative density : 1.88 a/cm³

: Insoluble in the following materials: cold water and hot water. Solubility(ies)

Partition coefficient: n-octanol/ : Not available.

Auto-ignition temperature : 393 to 530°C (739.4 to 986°F)

Decomposition temperature : Not available.

Viscosity : Kinematic (23 °C): 0,612 cm²/s (61,2 mm²/s)

Kinematic (40°C): >0,205 cm²/s (>20,5 mm²/s)

Explosive properties : Not available.

Date of issue : 16.06.2017 8/14

SECTION 9: Physical and chemical properties

Oxidising properties

: Not available.

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

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

10.2 Chemical stability

: The product is stable.

10.3 Possibility of hazardous reactions

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

10.4 Conditions to avoid

: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

10.5 Incompatible materials

: Keep away from the following materials to prevent strong exothermic reactions: oxidising agents, strong alkalis, strong acids.

10.6 Hazardous decomposition products

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

There are no data available on the mixture itself. The mixture has been assessed following the conventional method of the CLP Regulation (EC) No 1272/2008 and is classified for toxicological properties accordingly. See Sections 2 and 3 for details.

Exposure to component solvent vapour concentrations in excess of the stated occupational exposure limit may result in adverse health effects such as mucous membrane and respiratory system irritation and adverse effects on the kidneys, liver and central nervous system. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness.

Solvents may cause some of the above effects by absorption through the skin. Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin, resulting in non-allergic contact dermatitis and absorption through the skin.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

Ingestion may cause nausea, diarrhea and vomiting.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

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 Gas.	Rabbit	4000 ppm	4 hours
•	LD50 Dermal	Rabbit	>5000 mg/kg	_
	LD50 Oral	Rat	3500 mg/kg	_
toluene	LC50 Inhalation Vapour	Rat	49 g/m³	4 hours
	LD50 Oral	Rat	636 mg/kg	_
naphthalene	LD50 Oral	Rat	490 mg/kg	-

Acute toxicity estimates

Route	ATE value
	26829,3 mg/kg 209,5 mg/l

Irritation/Corrosion

Date of issue : 16.06.2017 9/14

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
toluene	Eyes - Mild irritant	Rabbit	-	0,5 minutes	-
				100 milligrams	
	Eyes - Mild irritant	Rabbit	-	870 Micrograms	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
	Skin - Mild irritant	Pig	_	milligrams 24 hours 250	
	OKIT - WIIIG IITIGATI	i ig	_	microliters	_
	Skin - Mild irritant	Rabbit	-	435 milligrams	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
	Skin - Moderate irritant	Rabbit	_	milligrams 500	-
				milligrams	
naphthalene	Skin - Mild irritant	Rabbit	-	495 milligrams	-
	Skin - Severe irritant	Rabbit	-	24 hours 0.	-
				05 Mililiters	

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
	0 ,	Not applicable. Not applicable.	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene	Category 2		hearing organs
toluene	Category 2		Not determined

Aspiration hazard

Product/ingredient name	Result
Jotatemp 650 (mmi-wcs)	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), heavy arom.	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
Solvent naphtha (petroleum), heavy arom.	Acute EC50 <10 mg/l	Daphnia	48 hours
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
ethylbenzene	Acute EC50 7,2 mg/l	Algae	48 hours
	Acute EC50 2,93 mg/l	Daphnia	48 hours
	Acute LC50 4,2 mg/l	Fish	96 hours
naphthalene	Acute EC50 0,4 mg/l	Algae - Skeletonema costatum	96 hours
•	Acute EC50 1,6 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 2800 µg/l Marine water	Crustaceans - Elasmopus pectenicrus - Adult	48 hours
	Chronic NOEC 0,67 ppm Fresh water	Fish - Oncorhynchus kisutch	40 days

Conclusion/Summary

: This material is harmful to aquatic life with long lasting effects.

12.2 Persistence and degradability

Conclusion/Summary: Not available.

Date of issue : 16.06.2017 **10/14**

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Solvent naphtha (petroleum),	-	-	Not readily
heavy arom.			
xylene	-	-	Readily
ethylbenzene	-	-	Readily
naphthalene	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Solvent naphtha (petroleum), heavy arom.	2.8 to 6.5	99 to 5780	high
xylene	-,	8.1 to 25.9	low
ethylbenzene toluene	3,6 2,73	90	low low
naphthalene	3,4	36.5 to 168	low

12.4 Mobility in soil

Soil/water partition : Not available.

coefficient (Koc)

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

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

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Do not allow to enter drains or watercourses. Material and/or container must be disposed of as hazardous waste. **European waste catalogue (EWC)**

08 01 11* Waste paint and varnish containing organic solvents or other dangerous substances

SECTION 14: Transport information

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

International transport regulations

14.1 UN number : 1263 **14.2 UN proper shipping** : Paint

name

14.3 Transport hazard : 3

class(es)



14.4 Packing group : ∭
14.5 Environmental : No.

hazards

Date of issue : 16.06.2017 **11/14**

SECTION 14: Transport information

14.6 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.

Additional information

ADR / RID

: Tunnel restriction code: (D/E) Hazard identification number: 33

Special provisions: 640D

IMDG

: Emergency schedules (EmS)

F-E, S-E

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

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

Annex XIV - List of substances subject to authorisation

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions: Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Other EU regulations

Europe inventory : Not determined.

Black List Chemicals : Not listed

: Not determined **Priority List Chemicals**

Industrial emissions (integrated pollution prevention and control) -

: Not listed

Air

Industrial emissions (integrated pollution prevention and control) - : Not listed

Water

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
toluene	-	-	Repr. 2, H361d	-
			(Unborn child)	
naphthalene	Carc. 2, H351	-	-	-

Chemical Weapons Convention List Schedule I : Not listed

Chemicals

Chemical Weapons

Chemical Weapons

: Not listed

Convention List Schedule II

Chemicals

: Not listed

Convention List Schedule III

Chemicals

15.2 Chemical safety

assessment

: Not applicable.

Date of issue : 16.06.2017 12/14

SECTION 16: Other information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Classification	Justification
Flam. Liq. 2, H225	On basis of test data
Asp. Tox. 1, H304	Expert judgment
Aquatic Chronic 3, H412	Calculation method

Full text of abbreviated H statements

: H225 Highly flammable liquid and vapour.

H226 Flammable liquid and vapour.

H302 Harmful if swallowed.

H304 May be fatal if swallowed and enters airways.

H312 Harmful in contact with skin.
H315 Causes skin irritation.
H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H336 May cause drowsiness or dizziness.H351 Suspected of causing cancer.

H361d Suspected of damaging the unborn child.

(Unborn child)

H373 May cause damage to organs through prolonged or repeated exposure.

(hearing (hearing organs)

organs)

H373 May cause damage to organs through prolonged or repeated exposure.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.
 H412 Harmful to aquatic life with long lasting effects.

Full text of classifications [CLP/GHS]

Acute Tox. 4, H302
 Acute Tox. 4, H312
 Acute Tox. 4, H312
 Acute Tox. 4, H332
 Acute Tox. 4, H332
 Aquatic Acute 1, H400
 Aquatic Chronic 1, H410
 Aquatic Chronic 2, H411
 Aquatic Chronic 3, H412
 Acute ToxICITY (oral) - Category 4
 Acute Tox. 4, H332
 Acute ToxICITY (inhalation) - Category 4
 Acute Tox. 4, H332
 Acute ToxICITY (oral) - Category 4
 Acute ToxICITY (inhalation) - Category 1
 LONG-TERM AQUATIC HAZARD - Category 1
 LONG-TERM AQUATIC HAZARD - Category 2
 LONG-TERM AQUATIC HAZARD - Category 3

Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1 CARCINOGENICITY - Category 2

EUH066 Repeated exposure may cause skin dryness or cracking. Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2

Flam. Liq. 2, H225 FLAMMABLE LIQUIDS - Category 2 Flam. Liq. 3, H226 FLAMMABLE LIQUIDS - Category 3

Repr. 2, H361d (Unborn TOXIC TO REPRODUCTION (Unborn child) - Category 2

child)

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2 STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED

(hearing organs) EXPOSURE) (hearing organs) - Category 2

STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) - Category 2

STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE) (Narcotic effects) - Category 3

Full text of abbreviated R phrases

: R11- Highly flammable.

R10- Flammable.

R40- Limited evidence of a carcinogenic effect. R63- Possible risk of harm to the unborn child.

R20- Harmful by inhalation. R22- Harmful if swallowed.

R20/21- Harmful by inhalation and in contact with skin.

Date of issue : 16.06.2017 **13/14**

SECTION 16: Other information

R48/20- Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R65- Harmful: may cause lung damage if swallowed.

R38- Irritating to skin.

R66- Repeated exposure may cause skin dryness or cracking.

R67- Vapours may cause drowsiness and dizziness.

R50/53- Very toxic to aquatic organisms, may cause long-term adverse effects in

the aquatic environment.

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

R52/53- Harmful to aquatic organisms, may cause long-term adverse effects in the

aquatic environment.

Full text of classifications

[DSD/DPD]

: F - Highly flammable

Carc. Cat. 3 - Carcinogen category 3

Repr. Cat. 3 - Toxic to reproduction category 3

Xn - Harmful Xi - Irritant

N - Dangerous for the environment

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Users should always consult Jotun for specific guidance on the general suitability of this product for their needs and specific application practices.

If there is any inconsistency between different language issues of this document, the English (United Kingdom) version will prevail.

Date of issue : 16.06.2017 **14/14**