SAFETY DATA SHEET



Hardtop Smart Pack Comp A

Section 1. Identification

GHS product identifier : Hardtop Smart Pack Comp A

Product code : 18940
Product description : Paint.

Other means of identification

: Not available.

Product type : Liquid.

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

Use in coatings - Industrial use

Supplier's details : Jotun Paints Inc.

842 W. Sam Houston Parkway North

City Center Three, Suite 300 Houston, TX 77024 USA

Phone number: +1 (713) 860-8241

SDSJotun@jotun.com

Emergency telephone number (with hours of

operation)

: 1-800-424-9300 (Staffed 24/7)

Section 2. Hazards identification

OSHA/HCS status

: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture

: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

AQUATIC HAZARD (LONG-TERM) - Category 2

GHS label elements

Hazard pictograms









Signal word

: Warning.

Hazard statements

: H226 - Flammable liquid and vapor.

H315 - Causes skin irritation.

H317 - May cause an allergic skin reaction.

H319 - Causes serious eye irritation. H335 - May cause respiratory irritation.

H361 - Suspected of damaging fertility or the unborn child.

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

organs)

H411 - Toxic to aquatic life with long lasting effects.

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Section 2. Hazards identification

Precautionary statements

Prevention

: P201 - Obtain special instructions before use.

P280 - Wear protective gloves, protective clothing and eye or face protection. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition

sources. No smoking.

P273 - Avoid release to the environment.

P260 - Do not breathe vapor.

Response

: P391 - Collect spillage.

P308 + P313 - IF exposed or concerned: Get medical advice or attention.

P304 + P312 - IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

P362 + P364 - Take off contaminated clothing and wash it before reuse.

P363 - Wash contaminated clothing before reuse. P302 + P352 - IF ON SKIN: Wash with plenty of water.

P333 + P313 - If skin irritation or rash occurs: Get medical advice or attention. P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. P337 + P313 - If eye irritation persists: Get medical advice or attention.

Storage : P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.

P403 + P235 - Keep cool.

Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national

and international regulations.

Hazards not otherwise

classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture

: Mixture

Other means of identification

: Not available.

CAS number/other identifiers

CAS number : Not applicable.

Product code : 18940

Ingredient name	%	CAS number
xylene	≥10 - <22	1330-20-7
epoxy resin (MW 700-1200)	≤10	25036-25-3
trizinc bis(orthophosphate)	≤10	7779-90-0
Solvent naphtha (petroleum), light arom.	≤10	64742-95-6
n-butyl acetate	≤5	123-86-4
ethylbenzene	≤5	100-41-4
butan-1-ol	≤2.9	71-36-3
decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate	≤3	1065336-91-5
fatty acids, C14-18 and C16-18-unsatd., maleated	<1	85711-46-2
maleic anhydride	<0.1	108-31-6

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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.

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Section 3. Composition/information on ingredients

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

Section 4. First aid measures

Description of necessary first aid measures

Eye contact

: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.

Inhalation

: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If 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. 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.

Skin contact

: Wash with plenty of soap and water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Get medical attention. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.

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. 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/effects, acute and delayed

Potential acute health effects

Eye contactInhalationCauses serious eye irritation.May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion: Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

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Section 4. First aid measures

Indication of immediate medical 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

Protection of first-aiders

- : No specific treatment.
- : 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. Fire-fighting measures

Extinguishing media

Suitable extinguishing

media

Unsuitable extinguishing media

: Use dry chemical, CO₂, water spray (fog) or foam.

: Do not use water jet.

Specific hazards arising from the chemical

: Flammable liquid and vapor. 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 nitrogen oxides phosphorus oxides halogenated compounds carbonyl halides 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 spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders:

If specialized 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 nonemergency personnel".

Environmental precautions

: Avoid dispersal of spilled 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.

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Section 6. Accidental release measures

Methods and materials 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.

Large spill

: Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach 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 spilled 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). Persons with a history of skin sensitization problems should not be employed in any process in which this product is used. Avoid exposure - obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. 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.

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. Store locked up. Eliminate all ignition sources. Separate from oxidizing 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
xylene	OSHA PEL (United States, 5/2018). [Xylenes]
	TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours. OSHA PEL 1989 (United States, 3/1989). [Xylenes (o-, m-, p-isomers)] STEL: 655 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes.

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Section 8. Exposure controls/personal protection

TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

CAL OSHA PEL (United States, 5/2018).

[xylene]

STEL: 655 mg/m³ 15 minutes. STEL: 150 ppm 15 minutes.

C: 300 ppm

TWA: 435 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

ACGIH TLV (United States, 1/2023). [pxylene and mixtures containing p-xylene] Ototoxicant.

TWA: 20 ppm 8 hours.

epoxy resin (MW 700-1200) trizinc bis(orthophosphate)

Solvent naphtha (petroleum), light arom.

n-butyl acetate

None None

None

NIOSH REL (United States, 10/2020).

STEL: 950 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 710 mg/m³ 10 hours. TWA: 150 ppm 10 hours.

OSHA PEL (United States, 5/2018).

TWA: 710 mg/m³ 8 hours. TWA: 150 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

STEL: 950 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 710 mg/m³ 8 hours. TWA: 150 ppm 8 hours.

ACGIH TLV (United States, 1/2023). [Butyl acetates]

STEL: 150 ppm 15 minutes. TWA: 50 ppm 8 hours.

CAL OSHA PEL (United States, 5/2018).

STEL: 950 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes. TWA: 710 mg/m³ 8 hours. TWA: 150 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes.

NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours.

TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m3 15 minutes. OSHA PEL (United States, 5/2018).

TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.

CAL OSHA PEL (United States, 5/2018).

STEL: 130 mg/m³ 15 minutes. STEL: 30 ppm 15 minutes. TWA: 22 mg/m³ 8 hours. TWA: 5 ppm 8 hours.

ACGIH TLV (United States, 1/2023).

Ototoxicant. Notes: K TWA: 20 ppm 8 hours. Form:

ACGIH TLV (United States, 1/2023).

ethylbenzene

butan-1-ol

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Section 8. Exposure controls/personal protection

TWA: 20 ppm 8 hours.

NIOSH REL (United States, 10/2020).

Absorbed through skin.

CEIL: 150 mg/m³ CEIL: 50 ppm

OSHA PEL (United States, 5/2018).

TWA: 300 mg/m³ 8 hours. TWA: 100 ppm 8 hours.

OSHA PEL 1989 (United States, 3/1989).

Absorbed through skin.

CEIL: 150 mg/m³ CEIL: 50 ppm

CAL OSHA PEL (United States, 5/2018).

Absorbed through skin.

C: 150 mg/m³ C: 50 ppm

decanedioic acid, 1,10-bis(1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl)

decanedioate

fatty acids, C14-18 and C16-18-unsatd., maleated

maleic anhydride

None

None

OSHA PEL 1989 (United States, 3/1989).

TWA: 0.25 ppm 8 hours. TWA: 1 mg/m³ 8 hours.

NIOSH REL (United States, 10/2020).

TWA: 1 mg/m³ 10 hours. TWA: 0.25 ppm 10 hours.

ACGIH TLV (United States, 1/2023). Skin

sensitizer. Inhalation sensitizer.

TWA: 0.01 mg/m³ 8 hours. Form: Inhalable

fraction and vapor

OSHA PEL (United States, 5/2018).

TWA: 0.25 ppm 8 hours. TWA: 1 mg/m³ 8 hours.

CAL OSHA PEL (United States, 5/2018).

TWA: 0.4 mg/m³ 8 hours. TWA: 0.1 ppm 8 hours.

Biological exposure indices

Ingredient name	Exposure indices
xylene	ACGIH BEI (United States, 1/2023) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift.
ethylbenzene	ACGIH BEI (United States, 1/2023) BEI: 0.15 g/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift.

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, vapor 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 ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

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Section 8. Exposure controls/personal protection

Hygiene measures

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection Hand protection

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

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 ISO 374-1:2016.

May be used, gloves(breakthrough time) 4 - 8 hours: Viton® (> 0.7 mm), butyl rubber (> 0.4 mm), PVC (> 0.5 mm), neoprene (> 0.35 mm)

Recommended, gloves(breakthrough time) > 8 hours: fluor rubber (> 0.35 mm), 4H/Silver Shield® (> 0.07 mm), Teflon (> 0.35 mm), polyvinyl alcohol (PVA) (> 0.3 mm), nitrile rubber (> 0.75 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 antistatic 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

Appearance

Physical state : Liquid.

Color : Black, Green., Grey, MCI Base 1, MCI Base 2, MCI Base 3, MCI Base 5, MCI Base 6, Orange, Red, White., Yellow.

Odor : Characteristic.
Odor threshold : Not applicable.
pH : Not applicable.

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Section 9. Physical and chemical properties

Melting point : Not applicable.

Boiling point : Lowest known value: 119°C (246.2°F) (butan-1-ol). Weighted average: 141.73°C

(287.1°F)

Flash point Closed cup: 28°C (82.4°F)

: Highest known value: 1 (n-butyl acetate) Weighted average: 0.8compared with butyl **Evaporation rate**

acetate

Flammability (solid, gas) : Not applicable.

Lower and upper explosive

(flammable) limits

: 0.8 - 11.3%

Vapor pressure : Highest known value: 1.5 kPa (11.3 mm Hg) (at 20°C) (n-butyl acetate). Weighted

average: 0.89 kPa (6.68 mm Hg) (at 20°C)

Vapor density : Highest known value: 4 (Air = 1) (n-butyl acetate). Weighted average: 3.66 (Air = 1)

11.1 to 12.68 pounds/gallon **Relative density** : 1.33 to 1.52 g/cm³

Solubility(ies)

Media	Result
cold water	Not soluble
hot water	Not soluble

Partition coefficient: n-

octanol/water

: Not available.

Auto-ignition temperature

: Lowest known value: 280 to 470°C (536 to 878°F) (Solvent naphtha (petroleum), light

arom.).

Decomposition temperature

: Not available.

Viscosity

: Kinematic (40°C (104°F)): >20.5 mm²/s (>20.5 cSt)

Section 10. Stability and reactivity

Reactivity

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

Chemical stability

Possibility of hazardous

reactions

: The product is stable.

: 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 pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.

Incompatible materials

: Reactive or incompatible with the following materials:

oxidizing materials

Hazardous decomposition products

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

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Vapor	Rat	20 mg/l	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
	TDLo Dermal	Rabbit	4300 mg/kg	-
n-butyl acetate	LC50 Inhalation Vapor	Rat	>21.1 mg/l	4 hours
-	LD50 Dermal	Rabbit	>17600 mg/kg	-
	LD50 Oral	Rat	13100 mg/kg	-
ethylbenzene	LC50 Inhalation Vapor	Rat - Male	17.8 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
butan-1-ol	LD50 Oral	Rat	790 mg/kg	-
maleic anhydride	LD50 Oral	Rat	400 mg/kg	-

Irritation/Corrosion

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Section 11. Toxicological information

Product/ingredient name	Result	Species	Score	Exposure	Observation
xylene	Eyes - Mild irritant	Rabbit	-	87 milligrams	-
	Skin - Mild irritant	Rat	-	8 hours 60 microliters	-
epoxy resin (MW 700-1200)	Eyes - Mild irritant	Mammal - species unspecified	-	-	-
	Skin - Mild irritant	Mammal - species unspecified	-	-	-
fatty acids, C14-18 and C16-18-unsatd., maleated	Skin - Mild irritant	Mammal - species unspecified	-	-	-
maleic anhydride	Eyes - Severe irritant	Rabbit	-	1 Percent	-

Sensitization

Product/ingredient name	Route of exposure	Species	Result
epoxy resin (MW 700-1200) fatty acids, C14-18 and C16-18-unsatd., maleated		Mammal - species unspecified Mammal - species unspecified	Sensitizing Sensitizing
maleic anhydride	skin	Mammal - species unspecified	Sensitizing

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
ethylbenzene	-	2B	-

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
Solvent naphtha (petroleum), light arom.	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects
n-butyl acetate	Category 3	-	Narcotic effects
butan-1-ol	Category 3	-	Respiratory tract irritation
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Name	3 3 3	Route of exposure	Target organs
ethylbenzene maleic anhydride	Category 2 Category 1 Category 2		hearing organs respiratory system

Aspiration hazard

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Section 11. Toxicological information

Name	Result
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : May cause respiratory irritation.

Skin contact: Causes skin irritation. May cause an allergic skin reaction.

Ingestion : No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact: Adverse symptoms may include the following:

pain or irritation watering redness

Inhalation : Adverse symptoms may include the following:

respiratory tract irritation

coughing

reduced fetal weight increase in fetal deaths skeletal malformations

Skin contact: Adverse symptoms may include the following:

irritation redness

reduced fetal weight increase in fetal deaths skeletal malformations

Ingestion : Adverse symptoms may include the following:

reduced fetal weight increase in fetal deaths skeletal malformations

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : May cause damage to organs through prolonged or repeated exposure. Once

sensitized, a severe allergic reaction may occur when subsequently exposed to very low

levels.

Carcinogenicity
 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.
 No known significant effects or critical hazards.

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Section 11. Toxicological information

Fertility effects : Suspected of damaging fertility.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
Oral	27777.78 mg/kg
Dermal	9214.47 mg/kg
Inhalation (vapors)	121.69 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
		pugio	
	Acute LC50 13400 μg/l Fresh water	Fish - Pimephales promelas	96 hours
trizinc bis(orthophosphate)	Acute LC50 0.14 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Chronic NOEC 0.1 mg/l	Micro-organism	4 hours
Solvent naphtha (petroleum),	Acute EC50 <10 mg/l	Daphnia	48 hours
light arom.			
	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	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
decanedioic acid, 1,10-bis	Acute EC50 1.68 mg/l	Algae	96 hours
(1,2,2,6,6-pentamethyl-			
4-piperidinyl) ester, mixt. with			
1-methyl 10-			
(1,2,2,6,6-pentamethyl-			
4-piperidinyl) decanedioate			
	Acute LC50 0.9 mg/l	Fish	96 hours
	Chronic NOEC 1 mg/l	Daphnia	21 days
maleic anhydride	Acute LC50 230 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

Persistence and degradability

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
xylene trizinc bis(orthophosphate) Solvent naphtha (petroleum), light arom.	- - -	-	Readily Not readily Not readily
ethylbenzene	-	-	Readily

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
xylene	3.12	8.1 to 25.9	low
trizinc bis(orthophosphate)	-	60960	high
Solvent naphtha (petroleum),	-	10 to 2500	high
light arom.			
n-butyl acetate	2.3	-	low
ethylbenzene	3.6	-	low
butan-1-ol	1	-	low
maleic anhydride	-2.78	-	low

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Section 12. Ecological information

Mobility in soil

Soil/water partition coefficient (K_{oc})

: Not available.

Other adverse effects

: No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods

: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

United States - RCRA Toxic hazardous waste "U" List

Ingredient	CAS#	Status	Reference number
Xylene	1330-20-7	Listed	U239
1-Butanol (I)	71-36-3	Listed	U031

Section 14. Transport information

	DOT Classification	TDG Classification	Mexico Classification	ADR/RID	IMDG	IATA
UN number	UN1263	UN1263	UN1263	UN1263	UN1263	UN1263
UN proper shipping name	Paint	Paint	Paint	Paint	Paint	Paint
Transport hazard class(es)	3	3	3	3	3	3
Packing group	III	III	III	III	III	III
Environmental hazards	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

Additional information

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Section 14. Transport information

: This product is not regulated as a marine pollutant when transported on inland waterways in sizes of ≤5 L or ≤5 kg or by road, rail, or inland air in non-bulk sizes, provided the packagings meet the general provisions of §§ 173.24 and 173.24a. Reportable quantity 837.68 lbs / 380.31 kg [70.503 gal / 266.88 L]. Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ (reportable quantity) transportation requirements.

TDG Classification

: Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3), 2.7 (Marine pollutant mark). The marine pollutant mark is not required when transported by road or rail.

Mexico Classification

ADR/RID

: Tunnel restriction code: (D/E)

Hazard identification number: 30 **IMDG** : Emergency schedules (EmS): F-E, S-E

Marine pollutant: Yes.

IATA

The environmentally hazardous substance mark may appear if required by other transportation regulations.

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 : Not available.

to IMO instruments

Section 15. Regulatory information

U.S. Federal regulations

: Clean Water Act (CWA) 307: trizinc bis(orthophosphate); ethylbenzene; lead Clean Water Act (CWA) 311: xylene; n-butyl acetate; ethylbenzene; methyl methacrylate; maleic anhydride

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Ingredient name	CAS number	%	
xylene	1330-20-7	11.938	
ethylbenzene	100-41-4	4.0033	
methyl methacrylate	80-62-6	0.0324	
maleic anhydride	108-31-6	0.00392	
lead	7439-92-1	0.001005	

Clean Air Act Section 602

Class I Substances

: Not listed

Clean Air Act Section 602

Class II Substances

: Not listed

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

DEA List II Chemicals (Essential Chemicals)

: Not listed

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ

: Not applicable.

SARA 311/312

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Section 15. Regulatory information

Classification

: FLAMMABLE LIQUIDS - Category 3 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1 TOXIC TO REPRODUCTION - Category 2

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract

irritation) - Category 3

SPECIFÍC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

Composition/information on ingredients

Name	%	Classification
xylene	≥10 - <22	FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (dermal) - Category 4 ACUTE TOXICITY (inhalation) - Category 4 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3
epoxy resin (MW 700-1200)	≤10	ASPIRATION HAZARD - Category 1 SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A SKIN SENSITIZATION - Category 1
Solvent naphtha (petroleum), light arom.	≤10	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 ASPIRATION HAZARD - Category 1
n-butyl acetate	≤5	FLAMMABLE LIQUIDS - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
ethylbenzene	≤5	FLAMMABLE LIQUIDS - Category 2 ACUTE TOXICITY (inhalation) - Category 4 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2
butan-1-ol	≤2.9	ASPIRATION HAZARD - Category 1 FLAMMABLE LIQUIDS - Category 3 ACUTE TOXICITY (oral) - Category 4 SKIN IRRITATION - Category 2 SERIOUS EYE DAMAGE - Category 1 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE)
decanedioic acid, 1,10-bis (1,2,2,6,6-pentamethyl-4-piperidinyl) ester, mixt. with 1-methyl 10-(1,2,2,6,6-pentamethyl-4-piperidinyl) decanedioate	≤3	(Narcotic effects) - Category 3 SKIN SENSITIZATION - Category 1A TOXIC TO REPRODUCTION - Category 2
fatty acids, C14-18 and C16-18-unsatd., maleated	<1	SKIN IRRITATION - Category 2 SKIN SENSITIZATION - Category 1
maleic anhydride	<0.1	ACUTE TOXICITY (oral) - Category 4 SKIN CORROSION - Category 1B SERIOUS EYE DAMAGE - Category 1 RESPIRATORY SENSITIZATION - Category 1 SKIN SENSITIZATION - Category 1A SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2

SARA 313

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Section 15. Regulatory information

	Product name	CAS number	%
Form R - Reporting requirements	xylene trizinc bis(orthophosphate) ethylbenzene	1330-20-7 7779-90-0 100-41-4	≥10 - <22 ≤10 ≤5
	butan-1-ol lead	71-36-3 7439-92-1	≤2.9 <0.01
Supplier notification	xylene trizinc bis(orthophosphate) ethylbenzene butan-1-ol lead	1330-20-7 7779-90-0 100-41-4 71-36-3 7439-92-1	≥10 - <22 ≤10 ≤5 ≤2.9 <0.01

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts : The following components are listed: XYLENE; n-butyl acetate; ETHYL BENZENE;

titanium dioxide; N-BUTYL ALCOHOL

New York : The following components are listed: Xylene mixed; Butyl acetate; Ethylbenzene; Butyl

alcohol

New Jersey : The following components are listed: XYLENES; ZINC compounds; n-butyl acetate;

ETHYL BENZENE; titanium dioxide; n-BUTYL ALCOHOL

Pennsylvania : The following components are listed: BENZENE, DIMETHYL-; ZINC COMPOUNDS; n-

butyl acetate; BENZENE, ETHYL-; titanium dioxide; 1-BUTANOL

California Prop. 65

WARNING: This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. This product can expose you to chemicals including Ethylbenzene, Titanium dioxide, glycidyl methacrylate and Carbon black, which are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level
ethylbenzene	Yes.	No.	Yes.	-
titanium dioxide	Yes.	No.	-	-
2,3-epoxypropyl methacrylate	Yes.	No.	-	-
carbon black	Yes.	No.	-	-
lead	Yes.	Yes.	Yes.	Yes.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Not listed.

UNECE Aarhus Protocol on POPs and Heavy Metals

Not listed.

International lists

National inventory

Australia : Not determined.

Canada : Not determined.

China : Not determined.

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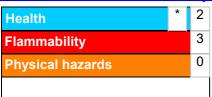
Section 15. Regulatory information

Europe : Not determined. **Japan** : Not determined.

Malaysia: Not determined.New Zealand: Not determined.Philippines: Not determined.Republic of Korea: Not determined.Taiwan: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)



Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

National Fire Protection Association (U.S.A.)



Procedure used to derive the classification

Classification	Justification
FLAMMABLE LIQUIDS - Category 3	On basis of test data
SKIN IRRITATION - Category 2	Calculation method
EYE IRRITATION - Category 2A	Calculation method
SKIN SENSITIZATION - Category 1	Calculation method
TOXIC TO REPRODUCTION - Category 2	Calculation method
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract	Calculation method
irritation) - Category 3	
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 2	Calculation method
AQUATIC HAZARD (LONG-TERM) - Category 2	Calculation method

History

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revision

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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 = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973

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Section 16. Other information

as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

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.

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