SAFETY DATA SHEET



Pilot QD Primer

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

1.1 Product identifier

Product name : Pilot QD Primer

Product code : 1537

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 - Industrial use Uses in Coatings - Professional use

See Annex to the Safety data sheet for additional information in the Exposure Scenario(s).

1.3 Details of the supplier of the safety data sheet

Jotun Paints (Europe) Ltd. Stather Road Flixborough, Scunthorpe North Lincolnshire DN15 8RR England

Tel: +44 17 24 40 00 00 Fax: +44 17 24 40 01 00 SDSJotun@jotun.com

1.4 Emergency telephone number

Contact NHS; phone 111.

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. 3, H226 Skin Irrit. 2, H315 STOT RE 2, H373 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 : R10

Xn; R20/21 Xi; R38 R52/53

Physical/chemical

hazards

: Flammable.

Human health hazards : Harmful by inhalation and in contact with skin. Irritating to skin.

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

environment.

Date of issue : 23.03.2015. 1/16

SECTION 2: Hazards identification

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 : Warning.

Hazard statements : Flammable liquid and vapour.

Causes skin irritation.

May cause damage to organs through prolonged or repeated exposure.

Harmful to aquatic life with long lasting effects.

Precautionary statements

General : Not applicable.

Prevention: Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. Avoid release to the environment. Do not

breathe vapour or spray.

Response : Get medical attention if you feel unwell. If skin irritation occurs: Get medical

attention.

Storage : Keep cool.

Disposal : Mot applicable.

Hazardous ingredients : xylene

Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)

Supplemental label

elements

: Contains 2-butanone oxime. May produce an allergic reaction.

Additional information: 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>Classification</u>		
Product/ingredient name	Identifiers	%	67/548/EEC	Regulation (EC) No. 1272/2008 [CLP]	Туре	Notes
x ylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥10 - <25	R10 Xn; R20/21 Xi; R38	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	[1] [2]	С
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4	≥3 - <5	F; R11 Xn; R20, R48/20, R65	Flam. Liq. 2, H225	[1] [2]	-
Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)	Index: 601-023-00-4 REACH #: 01-2119458049-33 EC: 265-185-4 CAS: 64742-82-1 Index: 649-330-00-2	≥1 - <3	R10 Xn; R48/20, R65 R66, R67 N; R51/53	Asp. Tox. 1, H304 Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 Asp. Tox. 1, H304 Aquatic Chronic 2,	[1] [2]	H-P

Date of issue : 23.03.2015. **2/16**

	<u> </u>					
trizinc bis (orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3	≥1 - <2	N; R50/53	H411 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	[1]	-
2-butanone oxime	CAS: 7779-90-0 Index: 030-011-00-6 REACH #: 01-2119539477-28	≥0,1 - <0,3	Carc. Cat. 3; R40	Acute Tox. 4, H302	[1]	-
	EC: 202-496-6 CAS: 96-29-7 Index: 616-014-00-0	10,0	Xn; R21 Xi; R41 R43	Acute Tox. 4, H312 Eye Dam. 1, H318 Skin Sens. 1, H317 Carc. 2, H351		
			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.		
		+			1	

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.

Type

- [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: Check for and remove any contact lenses. Immediately flush eyes with running

water for at least 15 minutes, keeping eyelids open. Seek immediate medical

attention.

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: No known significant effects or critical hazards.

Inhalation : No known significant effects or critical hazards.

Skin contact: Causes skin irritation.

Ingestion: No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : Adverse symptoms may include the following:

pain or irritation watering

redness

Date of issue : 23.03.2015. **3/16**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Pilot QD Primer

SECTION 4: First aid measures

Inhalation : No specific data.

Skin contact: Adverse symptoms may include the following:

irritation redness

Ingestion: No specific data.

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.

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

: 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 phosphorus oxides 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".

Date of issue : 23.03.2015. 4/16

SECTION 6: Accidental release measures

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.

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)

Date of issue : 23.03.2015. 5/16

SECTION 7: Handling and storage

Recommendations
Industrial sector specific

Not available.Not available.

solutions

SECTION 8: Exposure controls/personal protection

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).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values	
xylene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed	
	through skin.	
	STEL: 441 mg/m³ 15 minutes.	
	STEL: 100 ppm 15 minutes.	
	TWA: 220 mg/m³ 8 hours.	
	TWA: 50 ppm 8 hours.	
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 12/2011). Absorbed	
	through skin.	
	STEL: 552 mg/m³ 15 minutes.	
	STEL: 125 ppm 15 minutes.	
	TWA: 100 ppm 8 hours.	
	TWA: 441 mg/m³ 8 hours.	
Naphtha (petroleum), hydrodesulfurized heavy	EH40-WEL (United Kingdom (UK), 1/2005).	
(<0.1% Benzene)	STEL: 850 mg/m³ 15 minutes. Form: All forms	
	STEL: 150 ppm 15 minutes. Form: All forms	
	TWA: 566 mg/m³ 8 hours. Form: All forms	
	TWA: 100 ppm 8 hours. Form: All forms	

Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to 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

Product/ingredient name	Type	Exposure	Value	Population	Effects
xylene	DNEL	Short term Inhalation	289 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	289 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 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
ethylbenzene	DNEL	Short term Inhalation	293 mg/m³	Workers	Local
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic

Date of issue : 23.03.2015. 6/16

SECTION 8: Exposure controls/personal protection

			_		
	DNEL	Long term Inhalation	77 mg/m³	Workers	Systemic
	DNEL	Long term	15 mg/m³	Consumers	Systemic
		Inhalation			
	DNEL	Long term Oral	1,6 mg/kg bw/day	Consumers	Systemic
Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)	DNEL	Long term Inhalation	330 mg/m³	Workers	Systemic
DONZONO)	DNEL	Long term Dermal	44 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	71 mg/m³	Consumers	Systemic
	DNEL	Long term Dermal	26 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Oral	26 mg/kg bw/day	Consumers	Systemic
trizinc bis(orthophosphate)	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Consumers	Systemic
	DNEL	Long term Inhalation	2,5 mg/m ³	Consumers	Systemic
	DNEL	Long term Oral	0,83 mg/ kg bw/day	Consumers	Systemic

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	-
trizinc bis(orthophosphate)	PNEC	Fresh water	20,6 μg/l	-
	PNEC	Marine	6,1 µg/l	-
	PNEC	Sewage Treatment Plant	52 μg/l	-
	PNEC	Fresh water sediment	117,8 mg/kg dwt	-
	PNEC	Marine water sediment	56,5 mg/kg dwt	-
	PNEC	Soil	35,6 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.

Date of issue : 23.03.2015. **7/16**

SECTION 8: Exposure controls/personal protection

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

: 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.

May be used, gloves(breakthrough time) 4 - 8 hours: neoprene, butyl rubber, PVC Recommended, gloves(breakthrough time) > 8 hours: 4H, Teflon, polyvinyl alcohol (PVA), fluor rubber, nitrile rubber

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 appropriate, certified respirators. Use respiratory mask with charcoal and dust filter when spraying this product.(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 : Various colours.

Odour : Characteristic.

Odour threshold : Not available.

pH : Not applicable.

Melting point/freezing point : Not applicable.

Initial boiling point and boiling range

: Lowest known value: 136°C (276.8°F) (ethylbenzene). Weighted average: 140.

25°C (284.4°F)

Date of issue : 23.03.2015. **8/16**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Pilot QD Primer

SECTION 9: Physical and chemical properties

Flash point

: Closed cup: 25°C

Evaporation rate

Highest known value: 0.84 (ethylbenzene) Weighted average: 0.74compared

with butyl acetate

Flammability (solid, gas)

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

Upper/lower flammability or

explosive limits

: 0.6 - 7%

Vapour pressure

: Highest known value: 2.7 kPa (20.3 mm Hg) (at 20°C) (Naphtha (petroleum), hydrodesulfurized heavy). Weighted average: 0.9 kPa (6.75 mm Hg) (at 20°C) : Highest known value: 3.7 (Air = 1) (xylene). Weighted average: 3.7 (Air = 1)

Vapour density Relative density

: 1.557 g/cm³

Solubility(ies)

: Insoluble in the following materials: cold water and hot water.

Partition coefficient: n-octanol/ : Not available.

water

Auto-ignition temperature

: Lowest known value: >200°C (>392°F) (Naphtha (petroleum), hydrodesulfurized

heavy).

Decomposition temperature

: Not available.

Viscosity

Dynamic: Highest known value: 0.581 cP (xylene)

Kinematic: Highest known value: 0.773 cSt (ethylbenzene)

Kinematic (40C): Highest known value: 0.93 cSt (Naphtha (petroleum),

hydrodesulfurized heavy) Weighted average: 0.72 cSt

Explosive properties Oxidising properties

: Not available. 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

: Reactive or incompatible with the following materials:

10.6 Hazardous decomposition products oxidizing materials

: 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 Dangerous Preparations Directive 1999/45/EC and classified for toxicological hazards accordingly. See Sections 2 and 15 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. Solvents may cause some of the above effects by absorption through the skin. Symptoms and signs include headache, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. 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. Swallowing may cause nausea, diarrhoea, vomiting, gastro-intestinal irritation and chemical pneumonia.

Contains 2-butanone oxime. May produce an allergic reaction.

Date of issue : 23.03.2015. 9/16

SECTION 11: Toxicological information

Product/ingredient name	Result	Species	Dose	Exposure
xylene	LC50 Inhalation Gas.	Rat	6700 ppm	4 hours
	LD50 Oral	Rat	4300 mg/kg	-
ethylbenzene	LC50 Inhalation Gas.	Rabbit	4000 ppm	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	-
2-butanone oxime	LD50 Oral	Rat	930 mg/kg	-

Acute toxicity estimates

Route	ATE value		
	5157,8 mg/kg 42,81 mg/l		

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-butanone oxime	Eyes - Severe irritant	Rabbit	-	100 microliters	-

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)	Category 3	Not applicable.	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
ethylbenzene Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)	Category 2 Category 1	Not determined Not determined	ears Not determined

Aspiration hazard

Product/ingredient name	Result
ethylbenzene Naphtha (petroleum), hydrodesulfurized heavy (<0.1% Benzene)	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
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
Naphtha (petroleum), hydrodesulfurized heavy (<0. 1% Benzene)	Acute EC50 <10 mg/l	Daphnia	48 hours
,	Acute IC50 <10 mg/l	Algae	72 hours
	Acute LC50 <10 mg/l	Fish	96 hours
trizinc bis(orthophosphate)	Acute LC50 0,14 mg/l	Fish - Oncorhynchus mykiss	96 hours

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 : 23.03.2015. **10/16**

SECTION 12: Ecological information

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
x ylene	-	-	Readily
ethylbenzene	-	-	Readily
Naphtha (petroleum),	-	-	Not readily
hydrodesulfurized heavy (<0.			-
1% Benzene)			
trizinc bis(orthophosphate)	-	-	Not readily

12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
x ylene	3,12	8.1 to 25.9	low
ethylbenzene	3,15	-	low
Naphtha (petroleum),	-	10 to 2500	high
hydrodesulfurized heavy (<0.			_
1% Benzene)			
trizinc bis(orthophosphate)	-	60960	high
2-butanone oxime	0,63	5,011872336	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 If this product is mixed with other wastes, this code may no longer apply. If mixed with other wastes, the appropriate code should be assigned. For further information, contact your local waste authority.

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)



Date of issue : 23.03.2015. **11/16**

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

Pilot QD Primer

SECTION 14: Transport information

: 111 14.4 Packing group 14.5 Environmental No.

hazards

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: 30

Special provisions: 640E

IMDG Emergency schedules (EmS)

F-E, <u>S-E</u>

IATA

14.7 Transport in bulk according to Annex II of MARPOL 73/78 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

: Not determined. **Europe inventory**

Black List Chemicals : Not listed : Not listed **Priority List Chemicals** Integrated pollution : Listed

prevention and control

list (IPPC) - Air

: Not listed

Integrated pollution prevention and control

list (IPPC) - Water

Product/ingredient name	Carcinogenic effects	Mutagenic effects	Developmental effects	Fertility effects
2-butanone oxime	Carc. 2, H351	-	-	-

Chemical Weapons Convention List Schedule I : Not listed

Chemicals

Chemical Weapons Convention List Schedule II : Not listed

Chemicals

Chemical Weapons

: Not listed

Convention List Schedule III

Chemicals

: 23.03.2015. **Date of issue** 12/16

SECTION 15: Regulatory information

15.2 Chemical Safety Assessment This product contains substances for which Chemical Safety Assessments are still required.

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. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
STOT RE 2, H373	Calculation method
Aquatic Chronic 3, H412	Calculation method

Full t	ext	of	ab	brev	iated	Н
state	mer	nts				

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.H312 Harmful in contact with skin.

(dermal)

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.

H332 Harmful if inhaled.

(inhalation)

H336 May cause drowsiness or dizziness.

H351 Suspected of causing cancer.

H372 Causes damage to organs through prolonged or repeated exposure.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H373 May cause damage to organs through prolonged or repeated exposure.

(ears) (ears)

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, H332
 Acute To

Aquatic Chronic 3, H412 LONG-TERM AQUATIC HAZARD - Category 3
Asp. Tox. 1, H304 ASPIRATION HAZARD - Category 1
Carc. 2, H351 CARCINOGENICITY - Category 2

Eye Dam. 1, H318 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1

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

Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2

Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1

STOT RE 1, H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) - Category 1

STOT RE 2, H373 SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) - Category 2

STOT RE 2, H373 (ears) SPECIFIC TARGET ORGAN TOXICITY (REPEATED

EXPOSURE) (ears) - Category 2

STOT SE 3, H336 SPECIFIC TARGET ORGAN TOXICITY (SINGLE

EXPOSURE) (Narcotic effects) - Category 3

Date of issue : 23.03.2015. **13/16**

SECTION 16: Other information

Full text of abbreviated R phrases

: R11- Highly flammable.

R10- Flammable.

R40- Limited evidence of a carcinogenic effect.

R20- Harmful by inhalation. R21- Harmful in contact with skin.

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

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

through inhalation.

R65- Harmful: may cause lung damage if swallowed.

R41- Risk of serious damage to eyes.

R38- Irritating to skin.

R43- May cause sensitisation by skin contact.

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

Xn - Harmful Xi - Irritant

N - Dangerous for the environment

Date of printing Date of issue/ Date of

revision

: 23.03.2015. : 23.03.2015.

Date of previous issue : 05.03.2015.

Version : 3.01

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.

Date of issue : 23.03.2015. 14/16



Exposure Scenario: Uses in Coatings -Industrial use

Sector of Use : Industrial use

Process Category : PROC05 PROC07 PROC08a PROC10

Environmental release category(ies)

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

Operational conditions and risk management measures

Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours (unless stated differently)
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.

Type of activity or process

Risk management measures

Preparation of material for application : Provide a good standard of controlled ventilation (10 to 15 air changes per hour).

Roller, spreader, flow application : Provide extract ventilation to points where emissions occur.

Spraying - Manual : Carry out in a vented booth provided with laminar airflow.

Provide a good standard of controlled ventilation (10 to 15 air changes per hour). and Wear a respirator conforming to EN140 with type A/P2 filter or better.

Control of environmental exposure

Organisational measures to prevent/limit : Prevent environmental discharge consistent with regulatory requirements. release from site

Conditions and measures related to External treatment and disposal of waste should comply with applicable local and/or national external treatment of waste for disposal regulations. See Section 13 for additional waste treatment information.

Conditions and measures related to External recovery and recycling of waste should comply with applicable local and/or national external recovery of waste regulations.

Additional information

The exposure scenario for the mixture is based on the following substances:

REACH #: 01-2119488216-32

Page: 15/16



Exposure Scenario: Uses in Coatings - Professional use

Sector of Use : Professional use

Process Category : PROC05 PROC08a PROC10 PROC11

Environmental release category(ies) : ERC8a ERC8d

Covers the use in coatings (paints, inks, adhesives, etc) including exposures during use (including product transfer and preparation, application by brush, spray by hand or similar methods) and equipment cleaning.

Operational conditions and risk management measures

Control of worker exposure

Frequency and duration of use	: Covers daily exposures up to 8 hours (unless stated differently)
General - Operational conditions	: Assumes use at not more than 20°C above ambient temperature, unless stated differently. Assumes a good basic standard of occupational hygiene is implemented
General - Risk management measures	: Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.

	Wear suitable coveralls to prevent exposure to the skin. Use suitable eye protection. See Section 8 for information on appropriate personal protective equipment.
Type of activity or process	Risk management measures
Preparation of material for application - Indoor	 Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Avoid carrying out activities involving exposure for more than 1 hour. or Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator
	conforming to EN140 with type A/P2 filter or better.
Preparation of material for application - Outdoor	: Ensure operation is undertaken outdoors. Avoid carrying out activities involving exposure for more than 1 hour or
	Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Roller, spreader, flow application - Indoor	: Provide a good standard of controlled ventilation (10 to 15 air changes per hour). Wear a respirator conforming to EN140 with type A/P2 filter or better.
Roller, spreader, flow application - Outdoor	: Ensure operation is undertaken outdoors. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Spraying - Manual - Indoor	: Minimise exposure by partial enclosure of the operation or equipment and provide extract ventilation at openings. Wear a respirator conforming to EN140 with type A/P2 filter or better.
Spraying - Manual - Outdoor	: Ensure operation is undertaken outdoors. Wear a full-face respirator conforming to EN136 with Type A/P2 filter or better.

Control of environmental exposure

Sontion of Charlettar exposure			
Organisational measures to prevent/limit release from site	: Prevent environmental discharge consistent with regulatory requirements.		
Conditions and measures related to external treatment of waste for disposal	: External treatment and disposal of waste should comply with applicable local and/or national regulations. See Section 13 for additional waste treatment information.		
Conditions and measures related to external recovery of waste	 External recovery and recycling of waste should comply with applicable local and/or national regulations. 		

Additional information

The exposure scenario for the mixture is based on the following substances:

REACH #: 01-2119488216-32

Page: 16/16