


Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by Regulation (EU) No. 2020/878 - United Kingdom: Northern Ireland

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

1.1 Product identifier

Product name :  Hempel's Underwater Primer
Product identity : 2603019000
Product type : cyclized rubber paint

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

Field of application : yacht, ships and shipyards.
Identified uses : Consumer applications, Professional applications, Used by spraying.

1.3 Details of the supplier of the safety data sheet

Company details : Hempel UK Ltd
Berwyn House, The Pavilions
Llantarnam Park
Cwmbran
South Wales NP44 3FD
Telephone: 01633 833600
hempel@hempel.com

1.4 Emergency telephone number

Emergency telephone number (with hours of operation)

01633 833600 (08.00 - 17.00)
See Section 4 of the safety data sheet (first aid measures).

Date of issue : 15 December 2021


Date of previous issue : 2 July 2020.

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	FLAMMABLE LIQUIDS
Skin Sens. 1, H317	SKIN SENSITISATION
STOT SE 3, H336	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects)
STOT RE 2, H373	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE
Aquatic Chronic 3, H412	LONG-TERM (CHRONIC) AQUATIC HAZARD

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements





Hazard pictograms :



Signal word : Warning

Hazard statements :
H226 - Flammable liquid and vapour.
H317 - May cause an allergic skin reaction.
H336 - May cause drowsiness or dizziness.
H373 - May cause damage to organs through prolonged or repeated exposure.
H412 - Harmful to aquatic life with long lasting effects.

Precautionary statements :

General :  Keep out of reach of children. If medical advice is needed, have product container or label at hand.
Prevention :  Wear protective gloves. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use only outdoors or in a well-ventilated area. Avoid release to the environment. Do not breathe vapor, mist or spray.
Response :  Get medical advice/attention if you feel unwell. IF INHALED: Call a POISON CENTER or doctor if you feel unwell. Take off contaminated clothing and wash it before reuse. IF ON SKIN: Wash with plenty of water. If skin irritation or rash occurs: Get medical advice or attention.
Storage :  Store locked up. Store in a well-ventilated place. Keep container tightly closed.
Disposal : Dispose of contents and container in accordance with all local, regional, national and international regulations.

SECTION 2: Hazards identification

Hazardous ingredients : hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Methylstyrenated phenol
white spirit

Supplemental label elements : Repeated exposure may cause skin dryness or cracking.

Special packaging requirements

Containers to be fitted with child-resistant fastenings : Not applicable.

Tactile warning of danger : Yes, applicable.

2.3 Other hazards

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

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

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Product/ingredient name	Identifiers	%	Regulation (EC) No. 1272/2008 [CLP]	Type
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	REACH #: 01-2119463258-33 EC: 270-966-8 CAS: 64742-48-9	≥25 - ≤50	Flam. Liq. 3, H226 STOT SE 3, H336 Asp. Tox. 1, H304 EUH066	- [1]
Methylstyrenated phenol	REACH #: 01-2119555274-38 EC: 270-966-8 CAS: 68512-30-1	≥1 - ≤3	Skin Irrit. 2, H315 Skin Sens. 1B, H317 Aquatic Chronic 3, H412	- [1]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≥1 - ≤3	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	C [1] [2]
Solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6	≥1 - ≤3	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	P [1] [2]
white spirit	REACH #: 01-2119458049-33 EC: 265-191-7 CAS: 64742-88-7 Index: 649-405-00-X	≥1 - ≤3	Flam. Liq. 3, H226 STOT SE 3, H336 STOT RE 1, H372 (central nervous system (CNS)) (inhalation) Asp. Tox. 1, H304 Aquatic Chronic 2, H411	- [1] [2]
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	REACH #: 01-2119974119-29 EC: 251-846-4 CAS: 34140-91-5	<1	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT RE 2, H373 (oral) Aquatic Acute 1, H400 (M=10)	- [1]
(Z)-N-9-octadecenylpropane-1,3-diamine	EC: 230-528-9 CAS: 7173-62-8	≤0.077	Aquatic Chronic 2, H411 Acute Tox. 4, H302 Skin Corr. 1B, H314 Eye Dam. 1, H318 STOT RE 1, H372 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=1)	- [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 and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit, see section 8.
- [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
- [6] Additional disclosure due to company policy

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 breathing is irregular, drowsiness, loss of consciousness or cramps: Call 112 and give immediate treatment (first aid).
Eye contact :	Check for and remove any contact lenses. Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation :	Remove to fresh air. Keep person warm and at rest. If unconscious, place in recovery position and seek medical advice.
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.
Ingestion :	If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do not induce vomiting unless directed to do so by medical personnel. Lower the head so that vomit will not re-enter the mouth and throat.
Protection of first-aiders :	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.

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 :	Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
Skin contact :	May cause an allergic skin reaction.
Ingestion :	Can cause central nervous system (CNS) depression.

Over-exposure signs/symptoms

Eye contact :	No specific data.
Inhalation :	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness
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

Extinguishing media :	Recommended: alcohol resistant foam, CO ₂ , powders, water spray. Not to be used : waterjet.
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5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture :	Flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is harmful to aquatic life with long lasting effects. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway, sewer or drain.
Hazardous combustion products :	Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 5: Firefighting measures

5.3 Advice for firefighters

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. Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard. Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses. 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

Exclude sources of ignition and be aware of explosion hazard. Ventilate the area. Avoid breathing vapour or mist. Refer to protective measures listed in sections 7 and 8. No action shall be taken involving any personal risk or without suitable training. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

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.

6.3 Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Use spark-proof tools and explosion-proof equipment. 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

7.1 Precautions for safe handling

Vapors are heavier than air and may spread along floors. Vapors may form explosive mixtures with air. Prevent the creation of flammable or explosive concentrations of vapors in air and avoid vapor concentrations higher than the occupational exposure limits. In addition, the product should be used only in areas from which all naked lights and other sources of ignition have been excluded. Electrical equipment should be protected to the appropriate standard. To dissipate static electricity during transfer, ground drum and connect to receiving container with bonding strap. No sparking tools should be used.

Avoid inhalation of vapour, dust and spray mist. Avoid contact with skin and eyes. Eating, drinking and smoking should be prohibited in area where this material is handled, stored and processed. Appropriate personal protective equipment: see Section 8. Always keep in containers made from the same material as the original one.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a cool, well-ventilated area away from incompatible materials and ignition sources. Keep out of the reach of children. Keep away from: Oxidizing agents, strong alkalis, strong acids. No smoking. Prevent unauthorized access. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

See separate Product Data Sheet for recommendations or industrial sector specific solutions.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
xylene Solvent naphtha (petroleum), light arom. white spirit	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed through skin. STEL: 441 mg/m ³ 15 minutes. TWA: 50 ppm 8 hours. TWA: 220 mg/m ³ 8 hours. STEL: 100 ppm 15 minutes. EU OEL (Europe). TWA: 120 mg/m ³ 8 hours. Form: Tentativ TWA: 25 ppm 8 hours. Form: Tentativ EU OEL (Europe). (ACGIH) TWA: 25 ppm 8 hours. (ACGIH) TWA: 145 mg/m ³ 8 hours.

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 effect levels

Product/ingredient name	Type	Exposure	Value	Population	Effects
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	DNEL	Long term Inhalation	1500 mg/m ³	Workers	Systemic
Methylstyrenated phenol	DNEL	Long term Dermal	300 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Dermal	3.5 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	1.4 mg/m ³	Workers	Systemic
xylene	DNEL	Long term Inhalation	77 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	180 mg/kg bw/day	Workers	Systemic
Solvent naphtha (petroleum), light arom.	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m ³	Workers	Systemic
white spirit	DNEL	Long term Dermal	21 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	330 mg/m ³	Workers	Systemic
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	DNEL	Long term Inhalation	0.0984 mg/m ³	Workers	Systemic
	DNEL	Long term Dermal	14 µg/kg bw/day	Workers	Systemic

Predicted effect concentrations

Product/ingredient name	Compartment Detail	Value	Method Detail
Methylstyrenated phenol	Sewage Treatment Plant	2.4 mg/l	-
	Fresh water	14 µg/l	-
	Marine	1.4 µg/l	-
	Fresh water sediment	1064 mg/kg dwt	-
	Marine water sediment	106 mg/kg dwt	-
	Soil	212 mg/kg dwt	-
xylene	Fresh water	0.327 mg/l	-
	Marine water	0.327 mg/l	-
	Fresh water sediment	12.46 mg/kg	-
	Marine water sediment	12.46 mg/kg	-
	Soil	2.31 mg/kg	-
	Sewage Treatment Plant	6.68 mg/l	-
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	Fresh water	6.46 µg/l	-
	Marine water	0.646 µg/l	-
	Fresh water sediment	204 mg/kg dwt	-
	Marine water sediment	20.4 mg/kg dwt	-
	Soil	9.93 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls

Arrange sufficient ventilation by local exhaust ventilation and good general ventilation to keep the airborne concentrations of vapors or dust lowest possible and below their respective threshold limit value. Ensure that eyewash stations and safety showers are proximal to the work-station location.

Individual protection measures

SECTION 8: Exposure controls/personal protection

General :	Gloves must be worn for all work that may result in soiling. Apron/coveralls/protective clothing must be worn when soiling is so great that regular work clothes do not adequately protect skin against contact with the product. Safety eyewear should be used when there is a likelihood of exposure.
Hygiene measures :	Wash hands, forearms, and face thoroughly after handling compounds and before eating, smoking, using lavatory, and at the end of day.
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: safety glasses with side-shields.
Hand protection :	<p>Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training. The quality of the chemical-resistant protective gloves must be chosen as a function of the specific workplace concentrations and quantity of hazardous substances.</p> <p>Since the actual work situation is unknown. Supplier of gloves should be contacted in order to find the appropriate type. Below listed glove(s) should be regarded as generic advice:</p> <p>Recommended: Silver Shield / Barrier / 4H gloves, nitrile rubber, polyvinyl alcohol (PVA), Viton® Short term exposure: neoprene rubber, butyl rubber, natural rubber (latex), polyvinyl chloride (PVC)</p>
Body protection :	<p>Personal protective equipment for the body should be selected based on the task being performed and the risks involved handling this product.</p> <p>Wear suitable protective clothing. Always wear protective clothing when spraying.</p>
Respiratory protection :	Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator. If working areas have insufficient ventilation: When the product is applied by means that will not generate an aerosol such as, brush or roller wear half or totally covering mask equipped with gas filter of type A, when grinding use particle filter of type P. Be sure to use an approved/certified respirator or equivalent.

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

Physical state :	Liquid.
Colour :	Grey.
Odour :	Solvent-like
pH :	Testing not relevant or not possible due to nature of the product.
Melting point/freezing point :	-66°C This is based on data for the following ingredient: hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Boiling point/boiling range :	Testing not relevant or not possible due to nature of the product.
Flash point :	Closed cup: 35°C (95°F)
Evaporation rate :	Testing not relevant or not possible due to nature of the product.
Flammability :	<p>Highly flammable in the presence of the following materials or conditions: open flames, sparks and static discharge and heat.</p> <p>Flammable in the presence of the following materials or conditions: oxidising materials.</p> <p>Slightly flammable in the presence of the following materials or conditions: reducing materials.</p>
Lower and upper explosive (flammable) limits :	0.6 - 7.6 vol %
Vapour pressure :	0.2 kPa This is based on data for the following ingredient: hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics
Vapour density :	Testing not relevant or not possible due to nature of the product.
Specific gravity :	1.15 g/cm ³
Solubility(ies) :	Very slightly soluble in the following materials: cold water and hot water.
Partition coefficient (LogKow) :	Testing not relevant or not possible due to nature of the product.
Auto-ignition temperature :	Lowest known value: >220°C (>428°F) (white spirit).
Decomposition temperature :	Testing not relevant or not possible due to nature of the product.
Viscosity :	Aspiration hazard (H304) Not classified. Testing not relevant due to nature of the product.

SECTION 9: Physical and chemical properties

Explosive properties : Explosive in the presence of the following materials or conditions: open flames, sparks and static discharge, heat and oxidising materials.
Slightly explosive in the presence of the following materials or conditions: reducing materials and moisture.

Oxidising properties : Testing not relevant or not possible due to nature of the product.

9.2 Other information

Solvent(s) % by weight : Weighted average: 41 %
 Water % by weight : Weighted average: 0 %
 VOC content : 476 g/l
 TOC Content : Weighted average: 427 g/l
 Solvent Gas : Weighted average: 0.082 m³/l

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

Highly reactive or incompatible with the following materials: oxidising materials and acids.
 Reactive or incompatible with the following materials: reducing materials, organic materials and moisture.

10.6 Hazardous decomposition products

When exposed to high temperatures (i.e. in case of fire) harmful decomposition products may be formed:
 Decomposition products may include the following materials: carbon oxides metal oxide/oxides

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Exposure to component solvent vapor concentrations 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 headaches, dizziness, fatigue, muscular weakness, drowsiness and, in extreme cases, loss of consciousness. Repeated or prolonged contact with the preparation 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. Accidental swallowing may cause stomach pain. Chemical lung inflammation may occur if the product is taken into the lungs via vomiting.

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics Methylstyrenated phenol	LD50 Oral	Rat	>2000 mg/kg	-
	LC50 Inhalation Dusts and mists	Rat	>5 mg/l	4 hours
xylene	LD50 Dermal	Rat	>2000 mg/kg	-
	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapour	Rat	6350 ppm	4 hours
	LD50 Dermal	Rabbit	>4200 mg/kg	-
Solvent naphtha (petroleum), light arom.	LD50 Oral	Rat	3523 mg/kg	-
	LC50 Inhalation Vapour	Rat	6193 mg/m³	4 hours
	LD50 Dermal	Rabbit	3160 mg/kg	-
	LD50 Oral	Rat	3492 mg/kg	-

SECTION 11: Toxicological information

Acute toxicity estimates

Product/ingredient name	Oral mg/kg	Dermal mg/kg	Inhalation (gases) ppm	Inhalation (vapours) mg/l	Inhalation (dusts and mists) mg/l
Hempel's Underwater Primer		57069.7	259407.8		
xylene	3523	1100	5000		
Solvent naphtha (petroleum), light arom.	3492	3160			
(Z)-N-9-octadecenylpropane-1,3-diamine	500				

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	Eyes - Mild irritant	Rabbit	-	-
Methylstyrenated phenol	Eyes - Mild irritant	Rabbit	-	-
	Skin - Irritant	Rabbit	-	-
xylene	Eyes - Severe irritant	Rabbit	-	24 hours 5 milligrams
	Skin - Moderate irritant	Rabbit	-	24 hours 500 milligrams
	Skin - Irritant	Rabbit	-	-
Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 microliters
	Respiratory - Mild irritant	Rabbit	-	-
	Skin - Moderate irritant	Rabbit	-	-

Mutagenic effects

No known significant effects or critical hazards.

Carcinogenicity

No known significant effects or critical hazards.

Reproductive toxicity

No known significant effects or critical hazards.

Teratogenic effects

No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	Category 3		Narcotic effects
Solvent naphtha (petroleum), light arom.	Category 3		Respiratory tract irritation
white spirit	Category 3		Narcotic effects
	Category 3		Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
white spirit	Category 1	inhalation	central nervous system (CNS)
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	Category 2	oral	-
(Z)-N-9-octadecenylpropane-1,3-diamine	Category 1	-	-

Aspiration hazard

Product/ingredient name	Result
hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	ASPIRATION HAZARD - Category 1
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1
white spirit	ASPIRATION HAZARD - Category 1

Information on likely routes of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation.

Potential chronic health effects

Sensitisation : Contains Methylstyrenated phenol. May produce an allergic reaction.

11.2 Information on other hazards

Endocrine disrupting properties : No known data available in our database.

Other information : No additional known significant effects or critical hazards.

SECTION 12: Ecological information

12.1 Toxicity

Do not allow to enter drains or watercourses. Harmful to aquatic life with long lasting effects.

Product/ingredient name	Result	Species	Exposure
Methylstyrenated phenol	Acute EC50 15 mg/l	Algae	72 hours
Solvent naphtha (petroleum), light arom.	Acute EC50 14 - 51 mg/l	Daphnia	48 hours
	Acute EC50 25.8 mg/l	Fish	96 hours
white spirit	Acute EC50 2.6 mg/l	Algae - Pseudokirchneriella subcapitata (green algae)	96 hours
	Acute EC50 3.2 mg/l	Daphnia	48 hours
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	Acute LC50 9.22 mg/l	Fish - Oncorhynchus mykiss (rainbow trout)	96 hours
	Acute EC50 4.6 - 10 mg/l	Algae	72 hours
	Acute EC50 10 - 20 mg/l	Daphnia	48 hours
(Z)-N-9-octadecenypropane-1,3-diamine	Acute EC50 10 - 30 mg/l	Fish	96 hours
	Acute EC50 0.032 mg/l	Algae	72 hours
(Z)-N-9-octadecenypropane-1,3-diamine	Acute LC50 0.13 mg/l	Fish	96 hours
	Acute EC50 0.05 mg/l	Algae	72 hours

12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	OECD 301F Ready Biodegradability - Manometric Respirometry Test	80 % - Readily - 28 days	-	-
xylene	OECD 301F Ready Biodegradability - Manometric Respirometry Test	90 - 98 % - Readily - 28 days	-	-
Solvent naphtha (petroleum), light arom.	-	>60 % - Readily - 28 days	-	-
	OECD 301F Ready Biodegradability - Manometric Respirometry Test	78 % - Readily - 28 days	-	-
white spirit	-	>70 % - Readily - 28 days	-	-
	-	>60 % - Readily - 28 days	-	-
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	301F Ready Biodegradability - Manometric Respirometry Test	7 - 74 % - Readily - 28 days	-	-
	OECD 301D Ready Biodegradability - Closed Bottle Test	66 % - Readily - 28 days	-	-
(Z)-N-9-octadecenypropane-1,3-diamine	OECD 301D Ready Biodegradability - Closed Bottle Test	66 % - Readily - 28 days	-	-

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	-	-	Readily
Methylstyrenated phenol	-	-	Not readily
xylene	-	-	Readily
Solvent naphtha (petroleum), light arom.	-	-	Readily
white spirit	-	-	Readily
oleic acid, compound with (Z)-N-octadec-9-enylpropane-1,3-diamine (2:1)	-	-	Readily
(Z)-N-9-octadecenypropane-1,3-diamine	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
Hydrocarbons, C9-C11, n-alkanes, isoalkanes, cyclics, <2% aromatics	5 - 6.7	10 - 2500	high
Methylstyrenated phenol	3.627	-	low
xylene	3.12	8.1 - 25.9	low
Solvent naphtha (petroleum), light arom.	-	10 - 2500	high
white spirit	3 - 7.3	-	high
(Z)-N-9-octadecenypropane-1,3-diamine	0.03	0.5	low

SECTION 12: Ecological information

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}): No known data available in our database.

Mobility: No known data available in our database.

12.5 Results of PBT and vPvB assessment

Product/ingredient name	PBT	P	B	T	vPvB	vP	vB
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.							

12.6 Endocrine disrupting properties

No known data available in our database.

12.7 Other adverse effects

No known significant effects or critical hazards.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

The generation of waste should be avoided or minimised wherever possible. Residues of the product is listed as hazardous waste. Dispose of according to all state and local applicable regulations. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Spillage, remains, discarded clothes and similar should be discarded in a fireproof container.

European waste catalogue no. (EWC) is given below.




European waste catalogue (EWC) : 08 01 11*

Packaging

The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

SECTION 14: Transport information

Transport may take place according to national regulation or ADR for transport by road, RID for transport by train, IMDG for transport by sea, IATA for transport by air.

	14.1 UN / ID no.	14.2 Proper shipping name	14.3 Transport hazard class(es)	14.4 PG*	14.5 Env*	Additional information
ADR/RID Class	UN1263	PAINT	3 	III	No.	Tunnel code (D/E)
IMDG Class	UN1263	PAINT	3 	III	No.	Emergency schedules F-E, S-E
IATA Class	UN1263	PAINT	3 	III	No.	-

PG* : Packing group

Env.* : Environmental 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.

14.7 Maritime transport in bulk according to IMO instruments

Not applicable.

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

Annex XIV

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Not applicable.

Other EU regulations

Seveso category This product is controlled under the Seveso III Directive.

Seveso category
P5c: Flammable liquids 2 and 3 not falling under P5a or P5b

15.2 Chemical safety assessment

SECTION 16: Other information

Abbreviations and acronyms :

ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 EUH statement = CLP-specific Hazard statement
 RRN = REACH Registration Number
 DNEL = Derived No Effect Level
 PNEC = Predicted No Effect Concentration

Full text of abbreviated H statements :

H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H372	Causes damage to organs through prolonged or repeated exposure.
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.
EUH066	Repeated exposure may cause skin dryness or cracking.

Full text of classifications [CLP/GHS] :

Acute Tox. 4	ACUTE TOXICITY - Category 4
Aquatic Acute 1	SHORT-TERM (ACUTE) AQUATIC HAZARD - Category 1
Aquatic Chronic 1	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 1
Aquatic Chronic 2	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 2
Aquatic Chronic 3	LONG-TERM (CHRONIC) AQUATIC HAZARD - Category 3
Asp. Tox. 1	ASPIRATION HAZARD - Category 1
Eye Dam. 1	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 1
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3
Skin Corr. 1B	SKIN CORROSION/IRRITATION - Category 1B
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2
Skin Sens. 1	SKIN SENSITISATION - Category 1
Skin Sens. 1B	SKIN SENSITISATION - Category 1B
STOT RE 1	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 1
STOT RE 2	SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE - Category 2
STOT SE 3	SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE - Category 3

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

SECTION 16: Other information

Classification	Justification
<input checked="" type="checkbox"/> FLAMMABLE LIQUIDS SKIN SENSITISATION SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE (Narcotic effects) SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE LONG-TERM (CHRONIC) AQUATIC HAZARD	On basis of test data Calculation method Calculation method Calculation method Calculation method

Notice to reader

Indicates information that has changed from previously issued version.

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects for handling the product in a safe way and should not be construed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor spray painting by professionals with efficient ventilation such as spray booth or local exhaust ventilation

This safe use information is linked to : Professional spray painting, near-industrial setting - Level I
HMP I/PW 01a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor use

Range of application/Process conditions : Assumes a good standard of occupational hygiene and safety management has been implemented.

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	None	None
Cleaning	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor painting by professionals by dipping or with brush, roller, putty knife etc. with enhanced ventilation or local exhaust ventilation (LEV)

This safe use information is linked to : Professional low-energy painting, near-industrial setting - Level I
HMP I/PW 02a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor use

Range of application/Process conditions : Assumes a good standard of occupational hygiene and safety management has been implemented.

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type and air changes per hour				
Preparation of material for application	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by other than spraying	PROC10	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	None	None
Cleaning	PROC05	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Enhanced (mechanical) room ventilation	5 - 10	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor spray painting by professionals for specialist applications, with good general room ventilation plus respiratory protection

This safe use information is linked to : Professional spray painting, indoor (Level III)
HMP PW 03c

Sector(s) of use : Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

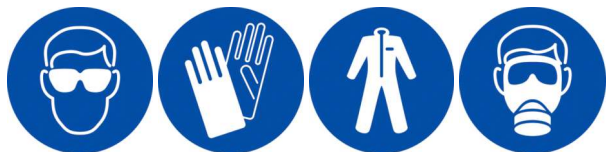
Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type	air changes per hour			
Preparation of material for application	PROC05	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Professional application of coatings by spraying	PROC11	More than 4 hours	Good general room ventilation	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.
Waste management	PROC08a	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear chemical-resistant gloves (tested to EN374) in combination with 'basic' employee training.

See chapter 8 of this Safety Data Sheet for specifications.



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Indoor painting by professionals with brush or roller, with good general room ventilation (open doors/windows)

This safe use information is linked to : Professional painting, indoor brush/roller - Level I
CEPE / HMP PW 04a

Sector(s) of use : Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Indoor use

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type	air changes per hour			
Preparation of material for application	PROC05	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08a	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Professional application of coatings by brush or roller	PROC10	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Good general room ventilation	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08a	More than 4 hours	Good general room ventilation	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Outdoor spray painting by professionals for specialist applications, with respiratory protection

This safe use information is linked to : Professional spray painting, near-industrial setting - Level I
HMP I/PW 05a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Outdoor use

Range of application/Process conditions : Assumes a good standard of occupational hygiene and safety management has been implemented.

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type	air changes per hour			
Preparation of material for application	PROC05	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by spraying	PROC07	More than 4 hours	Outdoors	3 - 5	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Outdoors	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.



This document is intended to communicate the conditions of safe use for the product and should always be read in combination with the product's Safety Data Sheet and labels.

General description of the process covered

Outdoor painting by professionals by dipping or with brush, roller, putty knife etc.

This safe use information is linked to : Professional low-energy painting, near-industrial setting - Level I
HMP I/PW 06a

Sector(s) of use : Industrial uses - Professional uses

Product category(ies) : Coatings and paints, thinners, paint removers

Operational conditions

Place of use : Outdoor use

Range of application/Process conditions : Assumes a good standard of occupational hygiene and safety management has been implemented.

Risk management measures (RMM)

Contributing activity	Process category (ies)	Maximum duration	Ventilation		Respiratory	Eye	Hands
			Type	air changes per hour			
Preparation of material for application	PROC05	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Loading of application equipment and handling of coated parts before curing	PROC08b	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Industrial application of coatings by other than spraying	PROC10	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Film formation - force drying, stoving and other technologies	PROC04	More than 4 hours	Outdoors	3 - 5	None	None	None
Cleaning	PROC05	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.
Waste management	PROC08b	More than 4 hours	Outdoors	3 - 5	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.

See chapter 8 of this Safety Data Sheet for specifications.

