# SAFETY DATA SHEET

FP401 Epoxy Primer DTM - White



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

#### 1.1 Product identifier

Product name : FP401 Epoxy Primer DTM - White

Product code : IME.FP401
Product description : Not available.
Product type : Liquid.

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

#### **Identified uses**

Professional spray painting, near-industrial setting Use in coatings - Priming materials and coatings

### **Uses advised against**

Not applicable.

### 1.3 Details of the supplier of the safety data sheet

Valspar b.v.
Zuiveringweg 89
8243 PE Lelystad
The Netherlands

tel: +31 (0)320 292200

e-mail address of person : msds@valspar.com

responsible for this SDS

### **National contact**

Sherwin-Williams UK Limited Avenue One Station Lane, Witney, United Kingdom Oxfordshire OX28 4XR

### 1.4 Emergency telephone number

### **National advisory body/Poison Centre**

**Telephone number** : UK: 0-800-014-8126

CALL: +(44)-870-8200418 (Hours of operation - 24 hours)

**Supplier** 

**Telephone number** : Call: +31 (0)320 292200 (8:30AM - 5PM)

### **SECTION 2: Hazards identification**

### 2.1 Classification of the substance or mixture

Product definition : Mixture

**Classification according to UK CLP/GHS** 

Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410

The product is classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

See Section 16 for the full text of the H statements declared above.

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

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### **SECTION 2: Hazards identification**

### 2.2 Label elements

**Hazard pictograms** 





Signal word Warning

Flammable liquid and vapour. **Hazard statements** 

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation.

Very toxic to aquatic life with long lasting effects.

**Precautionary statements** 

**Prevention** : Wear protective gloves. Wear eye or face protection. Keep away from heat, hot

surfaces, sparks, open flames and other ignition sources. No smoking. Avoid release to the environment. Avoid breathing vapour. Wash thoroughly after

handling.

Response : Collect spillage. 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. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists:

Get medical advice or attention.

: Not applicable. **Storage** 

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

and international regulations.

Supplemental label : Warning! Hazardous respirable droplets may be formed when sprayed. Do not

breathe spray or mist.

elements

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

**Special packaging requirements** 

Containers to be fitted with child-resistant

fastenings

: Not applicable.

: Not applicable.

Tactile warning of danger : Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

: 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 Mixture

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# **SECTION 3: Composition/information on ingredients**

Product/ingredient name	Identifiers	%	Classification	Туре
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	REACH #: 01-2119456619-26 EC: 500-033-5 CAS: 25068-38-6 Index: 603-074-00-8	≥10 - ≤25	Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Chronic 2, H411	[1]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≥10 - ≤25	Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)	[1]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1 CAS: 107-98-2 Index: 603-064-00-3	≤10	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
xylene	REACH #: 01-2119488216-32 EC: 215-535-7 CAS: 1330-20-7 Index: 601-022-00-9	≤10	Flam. Liq. 3, H226 Acute Tox. 4, H312 Acute Tox. 4, H332 Skin Irrit. 2, H315	[1] [2]
Solvent naphtha (petroleum), light arom.	REACH #: 01-2119455851-35 EC: 265-199-0 CAS: 64742-95-6	≤5	Flam. Liq. 3, H226 STOT SE 3, H335 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Chronic 2, H411 EUH066	[1]
cyclohexanone	EC: 203-631-1 CAS: 108-94-1 Index: 606-010-00-7	≤3	Flam. Liq. 3, H226 Acute Tox. 4, H332	[1] [2]
Trimethylbenzene	EC: 247-099-9 CAS: 25551-13-7	≤3	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
ethylbenzene	REACH #: 01-2119489370-35 EC: 202-849-4 CAS: 100-41-4 Index: 601-023-00-4	≤3	Flam. Liq. 2, H225 Acute Tox. 4, H332 STOT RE 2, H373 (hearing organs) Asp. Tox. 1, H304	[1] [2]
mesitylene	REACH #: 01-2119463878-19 EC: 203-604-4 CAS: 108-67-8 Index: 601-025-00-5	<1	Flam. Liq. 3, H226 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
1,2,4-trimethylbenzene	REACH #: 01-2119472135-42 EC: 202-436-9 CAS: 95-63-6 Index: 601-043-00-3	<1	Flam. Liq. 3, H226 Acute Tox. 4, H332 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411	[1] [2]
zinc oxide	REACH #: 01-2119463881-32 EC: 215-222-5 CAS: 1314-13-2 Index: 030-013-00-7	≤0.3	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1]
ethyl acetate	REACH #: 01-2119475103-46 EC: 205-500-4	≤0.3	Flam. Liq. 2, H225 Eye Irrit. 2, H319 STOT SE 3, H336	[1] [2]

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# **SECTION 3: Composition/information on ingredients**

SECTION 3. Composition	<u>~</u> _	- Calcillo		
	CAS: 141-78-6		EUH066	
1,2,3-trimethylbenzene	Index: 607-022-00-5 EC: 208-394-8 CAS: 526-73-8	≤0.3	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Eye Irrit. 2, H319	[1] [2]
n-butyl acetate	REACH #: 01-2119485493-29 EC: 204-658-1 CAS: 123-86-4	≤0.3	STOT SE 3, H335 Flam. Liq. 3, H226 STOT SE 3, H336 EUH066	[1] [2]
2-methoxy-1-methylethyl acetate	Index: 607-025-00-1 REACH #: 01-2119475791-29 EC: 203-603-9 CAS: 108-65-6	≤0.1	Flam. Liq. 3, H226 STOT SE 3, H336	[1] [2]
toluene	Index: 607-195-00-7 REACH #: 01-2119471310-51 EC: 203-625-9 CAS: 108-88-3 Index: 601-021-00-3	≤0.1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361d STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304	[1] [2]
Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine.	EC: 942-330-6	<0.1	Acute Tox. 1, 11304 Acute Tox. 4, H302 Skin Irrit. 2, H315 Skin Sens. 1A, H317 STOT RE 2, H373 (immune system, intestines, liver) Aquatic Chronic 3, H412	[1]
cumene	EC: 202-704-5 CAS: 98-82-8 Index: 601-024-00-X	<0.1	Flam. Liq. 3, H226 Carc. 1B, H350 STOT SE 3, H335 Asp. Tox. 1, H304 Aquatic Chronic 2, H411	[1] [2]
naphthalene	EC: 202-049-5 CAS: 91-20-3 Index: 601-052-00-2	<0.1	Acute Tox. 4, H302 Carc. 2, H351 Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	[1] [2]
benzene	REACH #: 01-2119447106-44 EC: 200-753-7 CAS: 71-43-2 Index: 601-020-00-8	<0.1	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Muta. 1B, H340 Carc. 1A, H350 STOT RE 1, H372 Asp. Tox. 1, H304	[1] [2]
There are no additional ingredients r			See Section 16 for the full text of the H statements declared above.	

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

### <u>Type</u>

- [1] Substance classified with a health or environmental hazard
- [2] Substance with a workplace exposure limit

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

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### SECTION 4: First aid measures

### 4.1 Description of 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 not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact

: 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 if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**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. Wash contaminated clothing thoroughly with water before removing it, or wear

### 4.2 Most important symptoms and effects, both acute and delayed

**Over-exposure signs/symptoms** 

Eye contact : Adverse symptoms may include the following:

> pain or irritation watering redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:

> irritation redness

Ingestion : No specific data.

### 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

: Use dry chemical, CO<sub>2</sub>, water spray (fog) or foam.

**Unsuitable extinguishing** : Do not use water jet.

media

media

### 5.2 Special hazards arising from the substance or mixture

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### SECTION 5: Firefighting measures

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. The vapour/gas is heavier than air and will spread along the ground. Vapours may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back. This material is very 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 combustion** products

: Decomposition products may include the following materials: carbon dioxide carbon monoxide sulfur oxides phosphorus oxides halogenated compounds 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.

### SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

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

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

### 6.2 Environmental precautions

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

### 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 noncombustible, 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 spilt product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

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### SECTION 6: Accidental release measures

# 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

#### **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. Do not get in eyes or on skin or clothing. Do not ingest. Avoid breathing vapour or mist. 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.

### 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidising materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

#### Seveso Directive - Reporting thresholds

### **Danger criteria**

	Notification and MAPP threshold	Safety report threshold
P5c	5000 tonne	50000 tonne
E1	100 tonne	200 tonne

### 7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific : Not available.

solutions

# **SECTION 8: Exposure controls/personal protection**

#### 8.1 Control parameters

**Occupational exposure limits** 

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# SECTION 8: Exposure controls/personal protection

Product/ingredient name	Exposure limit values
1-methoxy-2-propanol	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
, , ,	through skin.
	STEL: 560 mg/m³ 15 minutes.
	STEL: 150 ppm 15 minutes.
	TWA: 375 mg/m³ 8 hours.
	TWA: 100 ppm 8 hours.
xylene	EH40/2005 WELs (United Kingdom (UK), 1/2020). [xylene, o-,m-,
	p- or mixed isomers] Absorbed through skin.
	STEL: 441 mg/m³, 0 times per shift, 15 minutes.
	STEL: 100 ppm, 0 times per shift, 15 minutes. TWA: 220 mg/m³, 0 times per shift, 8 hours.
	TWA: 50 ppm, 0 times per shift, 8 hours.
cyclohexanone	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
Cyclonicationic	through skin.
	STEL: 20 ppm 15 minutes.
	TWA: 10 ppm 8 hours.
	STEL: 82 mg/m³ 15 minutes.
	TWA: 41 mg/m³ 8 hours.
Trimethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020).
•	[trimethylbenzenes, all isomers or mixtures]
	TWA: 25 ppm 8 hours.
	TWA: 125 mg/m³ 8 hours.
ethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 552 mg/m³ 15 minutes.
	STEL: 125 ppm 15 minutes.
	TWA: 441 mg/m³ 8 hours. TWA: 100 ppm 8 hours.
mositulono	EH40/2005 WELs (United Kingdom (UK), 1/2020).
mesitylene	[trimethylbenzenes, all isomers or mixtures]
	TWA: 125 mg/m <sup>3</sup> 8 hours.
	TWA: 25 ppm 8 hours.
1,2,4-trimethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	[trimethylbenzenes, all isomers or mixtures]
	TWA: 125 mg/m³ 8 hours.
	TWA: 25 ppm 8 hours.
ethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 400 ppm 15 minutes.
	TWA: 200 ppm 8 hours.
	STEL: 1468 mg/m³ 15 minutes.
	TWA: 734 mg/m³ 8 hours.
1,2,3-trimethylbenzene	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	[trimethylbenzenes, all isomers or mixtures]
	TWA: 125 mg/m³ 8 hours.
n butul acatata	TWA: 25 ppm 8 hours.
n-butyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020).
	STEL: 966 mg/m³ 15 minutes. STEL: 200 ppm 15 minutes.
	TWA: 724 mg/m³ 8 hours.
	TWA: 150 ppm 8 hours.
2-methoxy-1-methylethyl acetate	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
2 methoxy 1 methylethyl decidio	through skin.
	STEL: 548 mg/m³ 15 minutes.
	TWA: 50 ppm 8 hours.
	TWA: 274 mg/m³ 8 hours.
	STEL: 100 ppm 15 minutes.
toluene	EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed
	through skin.
	STEL: 384 mg/m³ 15 minutes.
	STEL: 100 ppm 15 minutes.

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TWA: 191 mg/m<sup>3</sup> 8 hours. TWA: 50 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed cumene through skin. STEL: 250 mg/m<sup>3</sup> 15 minutes. STEL: 50 ppm 15 minutes. TWA: 125 mg/m<sup>3</sup> 8 hours. TWA: 25 ppm 8 hours. EU OEL (Europe, 1/2022). Notes: list of indicative naphthalene occupational exposure limit values TWA: 50 mg/m<sup>3</sup> 8 hours. TWA: 10 ppm 8 hours. EH40/2005 WELs (United Kingdom (UK), 1/2020). Absorbed benzene through skin. TWA: 1 ppm 8 hours. TWA: 3.25 mg/m<sup>3</sup> 8 hours.

Recommended monitoring procedures

: Reference should be made to appropriate monitoring standards. Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

### **DNELs/DMELs**

Product/ingredient name	Туре	Exposure	Value	Population	Effects
trizinc bis(orthophosphate)	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	2.5 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Inhalation	5 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
1-methoxy-2-propanol	DNEL	Long term Dermal	51 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	43.9 mg/m³		Systemic
	DNEL	Long term Dermal	78 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	183 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	369 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/ m³	Workers	Systemic
xylene	DNEL	Short term Inhalation	174 mg/m³	General population [Consumers]	Local
	DNEL	Short term Inhalation	174 mg/m³	General population [Consumers]	Systemic
	DNEL	Long term Oral	12.5 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	65.3 mg/m <sup>3</sup>	General population	Local
	DNEL	Long term Inhalation	65.3 mg/m³		Systemic
	DNEL	Long term Dermal	125 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	212 mg/kg	Workers	Systemic

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<u> </u>		-			
	DNEL	Long term	bw/day 221 mg/m³	Workers	Local
	DNEL	Inhalation Long term	221 mg/m³	Workers	Systemic
	DNEL	Inhalation Short term	260 mg/m³	General	Local
	DNEL	Inhalation Short term	260 mg/m <sup>3</sup>	population General	Systemic
	DNEL	Inhalation Short term	442 mg/m³	population Workers	Local
	DNEL	Inhalation Short term	442 mg/m³	Workers	Systemic
Solvent naphtha (petroleum), light	DNEL	Inhalation Long term Dermal	11 mg/kg	General	Systemic
arom.	DNEL	Long term Inhalation	bw/day 32 mg/m³	population General population	Systemic
	DNEL	Long term Oral	11 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	150 mg/m <sup>3</sup>	Workers	Systemic
	DNEL	Long term Inhalation	0.41 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	1.9 mg/m³	Workers	Systemic
	DNEL	Long term Inhalation	178.57 mg/ m³	General population	Local
	DNEL	Short term Inhalation	640 mg/m³	General population	Local
	DNEL	Long term Inhalation	837.5 mg/ m³	Workers	Local
	DNEL	Short term Inhalation Short term	1066.67 mg/m³	Workers	Local
	DNEL	Inhalation Short term	1152 mg/ m³ 1286.4 mg/	General population Workers	Systemic Systemic
cyclohexanone	DNEL	Inhalation Short term Dermal	m <sup>3</sup> 1 mg/kg	General	Systemic
oyoromoxamome	DNEL	Long term Dermal	bw/day 1 mg/kg	population General	Systemic
	DNEL	Short term Oral	bw/day 1.5 mg/kg	population General	Systemic
	DNEL	Long term Oral	bw/day 1.5 mg/kg	population General	Systemic
	DNEL	Long term	bw/day 2.55 mg/m³	population General	Systemic
	DNEL	Inhalation Short term Dermal	4 mg/kg	population Workers	Systemic
	DNEL	Long term Dermal	bw/day 4 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	5 mg/m³	General population	Systemic
	DNEL	Long term Inhalation	10 mg/m³	Workers	Local
	DNEL	Long term Inhalation	10 mg/m³	Workers	Systemic
	DNEL	Short term Inhalation	20 mg/m³	Workers	Local
	DNEL	Short term Inhalation	20 mg/m³	Workers	Systemic
ethylbenzene	DMEL	Long term	442 mg/m³	Workers	Local

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DMEL Cong term Oral Inhalation DNEL Cong term Oral DNEL Cong term Ona DNEL Cong term Oral DNEL DNE	 •					
DNEL   Long term Oral   DNEL   Long term (Inhalation   DNEL   D		DMEL		884 mg/m³	Workers	Systemic
DNEL   Long term   15 mg/m³   General   Systemic   Inhalation   DNEL   Long term   Drimal   180 mg/kg   Workers   Systemic   Inhalation   DNEL   Long term   Drimal   DNEL   Long term   Drimal   DNEL   DNEL   Short term   Inhalation   DNEL   DNEL   Short term   Inhalation   DNEL   DNEL   Dnet		DNEL				Systemic
DNEL   Long term   17 mg/m³   Workers   Systemic   Inhalation   DNEL   Long term Dermal   180 mg/kg   293 mg/m²   Workers   Local   Inhalation   DNEL   Short term   Inhalation   DNEL   Cong term   Domes   Dnel   Cong term   Domes   Dnel   Cong term   Domes   Dnel   Cong term   Dnel   Cong term   Dnel   Dnel   Dnel   Cong term   Dnel   Dnel   Dnel   Dnel   Cong term   Dnel		DNEL			General	Systemic
DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term Inhalation DNEL Short term Inhalation DNEL Cong term Dermal Inha		DNEL	Long term	77 mg/m³		Systemic
mesitylene  DNEL short term inhalation DNEL shor		DNEL			Workers	Systemic
mesitylene    DNEL   Long term Oral   15 mg/kg   29.4 mg/m   General   Dopulation   Short term   Inhalation   DNEL   Short term   Inhalation   DNEL   Long term Dermal   Inhalation   DNEL   Long term   Dnemal   DNEL   Long term   DNEL   Dnemal   DNEL   Dnemal   DNEL   Dnemal   DNEL   Dnemal   DNEL   Dnemal   DNEL   Dnemal   Dnem		DNEL			Workers	Local
DNEL Inhalation DNEL Short term Inhalation DNEL Long term Dermal DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Long term Dermal DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term Dnemal DNEL Dng term Dnemal	mesitylene	DNEL				Systemic
DNEL Short term Inhalation DNEL Long term Dermal Inhalation DNEL Long term Dermal Long term Dermal DNEL Long term Dermal Long term Dermal DNEL DNE		DNEL			General	Local
DNEL Inhalation DNEL Long term Inhalation DNEL Long term Dermal Inhalation DNEL Long term Inhalation DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term Dermal Inhalation DNEL DNE		DNEL	Short term	29.4 mg/m³	General	Systemic
Inhalation DNEL Long term permal Inhalation DNEL Long term (100 mg/m³ population DNEL (100 perm (100 mg/m³)		DNEL		100 mg/m <sup>3</sup>		Local
DNEL Long term Inhalation DNEL Cong term Inhalation DNEL Cong term Inhalation DNEL Cong term Inhalation DNEL Cong term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Cong term Dermal DNEL DNET DNET DNET DNET DNET DNET DNET DNET		DNEL		100 mg/m <sup>3</sup>	Workers	Systemic
Inhalation   DNEL   Long term   Inhalation   DNEL   Short term   Inhalation   DNEL   Long term Dermal   Local   DNEL   Long term Dermal   Local   DNEL   Long term   DNEL   Long te				kg bw/day		
Inhalation			Inhalation		population	
Inhalation DNEL Long term Inhalation DNEL 1,2,4-trimethylbenzene  DNEL DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term DNEL Long term Inhalation DNEL Long term Dermal DNEL Long term Inhalation DNEL Systemic DNEL DNEL DNEL DNEL Systemic DNEL DNEL DNEL DNEL DNEL Systemic DNEL DNEL DNEL DNEL DNEL DNEL DNEL DNEL			Inhalation		population	
Inhalation Long term Dermal  1,2,4-trimethylbenzene  DNEL DNEL DNEL DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term Inhalation DNEL Dong term Dermal B3 mg/kg Workers Systemic Dopulation General Dopulation Gener			Inhalation	_		
1,2,4-trimethylbenzene			Inhalation	_		
DNEL Short term Inhalation DNEL Long term Dermal Inhalation DNEL Long term Dermal Inhalation DNEL Inhalat	1.2.4 trimothylhonzono			kg bw/day	population	
Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Short term Inhalation DNEL Long term Dermal DNEL Long term Inhalation DNEL Long term Dermal Systemic DNEL Long term Dermal Systemic DNEL Systemic DNEL Systemic DNEL Systemic DNEL Systemic DNEL Systemic	1,2,4-uimeuryibenzene			bw/day	population	
Inhalation   DNEL   Short term   Inhalation   DNEL   Short term   Inhalation   DNEL   Long term   DNEL   Long term   Inhalation   DNEL   Long term   DNEL   Long term   DNEL   Long term   Inhalation   DNEL   Long term   DNEL   Long term   Inhalation   DNEL   Long term			Inhalation	· ·	population	
Inhalation DNEL Short term   100 mg/m³   Workers   Systemic   DNEL Long term Dermal   16171 mg/ kg bw/day   DNEL Long term   29.4 mg/m³   General population   DNEL Long term   29.4 mg/m³   General population   DNEL Long term   100 mg/m³   Workers   DNEL Long term Dermal   9512 mg/ kg bw/day   DNEL Long term Dermal   9512 mg/ kg bw/day   DNEL Long term Dermal   Systemic   DNEL Long term Dermal   Systemic   DNEL Long term   2.5 mg/m³   General population   DNEL Long term   2.5 mg/m³   General population   DNEL Long term Dermal   Systemic   DNEL Systemic   Systemic   DNEL Long term Dermal   Systemic   DNEL Systemic   Systemic   Systemic   DNEL Systemic   Systemic   Systemic   DNEL Systemic   Systemic   Syst			Inhalation		population	
Inhalation DNEL Long term Dermal Systemic  DNEL Long term 29.4 mg/m³ General population DNEL Long term 100 mg/m³ Workers  DNEL Long term Dermal Systemic  DNEL Long term 2.5 mg/m³ General population  DNEL Long term Dermal Systemic  DNEL Systemic Systemic			Inhalation	J		
DNEL Long term lnhalation			Inhalation	_		
Inhalation DNEL Long term DNEL Long term Dermal  Zinc oxide  DNEL Long term Dermal  DNEL Long term DNEL Systemic DNEL Systemic				kg bw/day		
DNEL Long term Inhalation DNEL Long term Dermal Inhalation		DNEL			population	Systemic
DNEL Long term 100 mg/m³ Workers Systemic  DNEL Long term Dermal 2		DNEL	Long term	100 mg/m³		Local
DNEL Long term Dermal y by bw/day systemic bw/day bw/day DNEL Long term Dermal B3 mg/kg Workers Systemic Systemic Systemic DNEL Long term Dermal B3 mg/kg Workers Systemic		DNEL	Long term	100 mg/m³	Workers	Systemic
zinc oxide  DNEL Long term Dermal 83 mg/kg bw/day population  DNEL Long term Dermal 2.5 mg/m³ General population  Under Dermal Population Systemic population  DNEL Long term Dermal 83 mg/kg Workers Systemic		DNEL				Systemic
DNEL Long term 2.5 mg/m³ General Systemic population DNEL Long term Dermal 83 mg/kg Workers Systemic	zinc oxide	DNEL	Long term Dermal	83 mg/kg	General	Systemic
DNEL Long term Dermal 83 mg/kg Workers Systemic		DNEL			General	Systemic
I DW/nav		DNEL		83 mg/kg bw/day		Systemic
DNEL Long term 5 mg/m³ Workers Systemic		DNEL	Long term		Workers	Systemic

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ethyl acetate DNEL Long term Oral 4.5 mg/kg General System bw/day population	mic
	mic i
I NW/day I nontilation	1110
	mio
	IIIC
	mio
DNEL Long term Dermal 63 mg/kg Workers Syster	IIIC
DNEL Long term 367 mg/m³ General Local	
Inhalation population	
DNEL Long term 367 mg/m³ General System	mic
Inhalation population	1110
DNEL Short term 734 mg/m³ General Local	
Inhalation population	
DNEL Short term 734 mg/m³ General System	mic
Inhalation population	
DNEL Long term 734 mg/m³ Workers Local	
Inhalation	
DNEL Long term 734 mg/m³ Workers Syster	mic
Inhalation	
DNEL Short term 1468 mg/ Workers Local	
Inhalation m <sup>3</sup>	:-
DNEL Short term 1468 mg/ Workers Syster	IIIC
n-butyl acetate   Inhalation   m³   Local   Local   Local   DNEL   Local   Loc	
In-butyl acetate   DNEL   Long term   35.7 mg/m² General   Local   Inhalation   population	
[Consumers]	
DNEL Short term 300 mg/m³ General Local	
Inhalation population	
[Consumers]	
DNEL   Short term Dermal   6 mg/kg   General   Syster	mic
bw/day population	
DNEL Long term Oral 2 mg/kg General Syster	mic
bw/day population	
[Consumers]	•
DNEL Short term Oral 2 mg/kg General System	mic
bw/day   population   [Consumers]	
DNEL Long term 300 mg/m³ Workers Syster	mic
Inhalation	1110
DNEL Short term 600 mg/m³ Workers Syster	mic
Inhalation	
DNEL Long term 300 mg/m³ Workers Local	
Inhalation	
DNEL Short term 600 mg/m³ Workers Local	
Inhalation Inhalation	
DNEL Long term Dermal 11 mg/kg Workers System	mic
DNEL   Short term Dermal   11 mg/kg   Workers   Syster	mio
DNEL Short term Dermal 11 mg/kg Workers Syster	HIC
DNEL Long term Oral 2 mg/kg General Syster	mic
bw/day   population	1110
DNEL Short term Oral 2 mg/kg General System	mic
bw/day population	-
DNEL Long term Dermal 3.4 mg/kg General Syster	mic
bw/day population	
DNEL Short term Dermal 6 mg/kg General System	mic
bw/day population	
DNEL Long term Dermal 7 mg/kg Workers Syster	mic
bw/day	
DNEL Short term Dermal 11 mg/kg Workers System	nic
DNEL Long term bw/day   Syster	mic
DNEL Long term 12 mg/m³ General Syster Inhalation	IIIC
DNEL Long term 35.7 mg/m³ General Local	

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	l	1			
	DNEL	Inhalation Long term	48 mg/m³	population Workers	Systemic
	DNEL	Inhalation Short term	300 mg/m³	General	Local
		Inhalation	J	population	
	DNEL	Short term Inhalation	300 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term	300 mg/m <sup>3</sup>	Workers	Local
	DNEL	Inhalation Short term	600 mg/m <sup>3</sup>	Workers	Local
	DNEL	Inhalation Short term	600 mg/m <sup>3</sup>	Workers	Systemic
2-methoxy-1-methylethyl acetate	DNEL	Inhalation Long term Dermal	796 mg/kg	Workers	Systemic
	DNEL	Long term	bw/day 33 mg/m³	General	Local
	DNEL	Inhalation Long term	33 mg/m³	population General	Systemic
	DNEL	Inhalation Long term Oral	36 mg/kg	population General	Systemic
	DNEL	Long term	bw/day 275 mg/m³	population Workers	Systemic
	DNEL	Inhalation Long term Dermal	320 mg/kg	General	Systemic
	DNEL	Short term	bw/day 550 mg/m³	population Workers	Local
	DNEL	Inhalation Long term Dermal	796 mg/kg	Workers	Systemic
toluene	DNEL	Long term Oral	bw/day 8.13 mg/	General population	Systemic
	DNEL	Long term Inhalation	kg bw/day 56.5 mg/m³		Local
	DNEL	Long term Inhalation	56.5 mg/m³		Systemic
	DNEL	Long term Inhalation	192 mg/m³	Workers	Local
	DNEL	Long term Inhalation	192 mg/m³	Workers	Systemic
	DNEL	Long term Dermal	226 mg/kg bw/day	General population	Systemic
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Local
	DNEL	Short term Inhalation	226 mg/m <sup>3</sup>	General population	Systemic
	DNEL	Long term Dermal	384 mg/kg bw/day	Workers	Systemic
	DNEL	Short term Inhalation	384 mg/m³	Workers	Local
	DNEL	Short term Inhalation	384 mg/m³	Workers	Systemic
Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-	DNEL	Long term Oral	0.012 mg/ kg bw/day	General population	Systemic
octadec-9-en-1-amine.	DNEL	Long term Dermal	0.012 mg/ kg bw/day	General population	Systemic
	DNEL	Long term Dermal	0.024 mg/ kg bw/day	Workers	Systemic
cumene	DNEL	Long term Dermal	1.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	15.4 mg/ kg bw/day	Workers	Systemic
į	1	i			·

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# SECTION 8: Exposure controls/personal protection

	DNEL	Long term	100 mg/m <sup>3</sup>	Workers	Systemic
		Inhalation			
	DNEL	Short term	250 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
	DNEL	Long term Oral	5 mg/kg bw/day	General population	Systemic
	DNEL	Long term	16.6 mg/m <sup>3</sup>	General	Systemic
		Inhalation		population	
naphthalene	DNEL	Long term Dermal	3.57 mg/	Workers	Systemic
			kg bw/day		
	DNEL	Long term	25 mg/m <sup>3</sup>	Workers	Local
		Inhalation			
	DNEL	Long term	25 mg/m³	Workers	Systemic
		Inhalation			
benzene	DNEL	Long term	1.9 mg/m³	Workers	Systemic
		Inhalation			
	DNEL	Long term	0.14 mg/m <sup>3</sup>	General	Systemic
		Inhalation		population	

### **PNECs**

Product/ingredient name	Compartment Detail	Value	Method Detail
rizinc bis(orthophosphate)	Fresh water	20.6 μg/l	-
	Marine water	6.1 µg/l	-
	Sewage Treatment	100 µg/l	-
	Plant		
	Fresh water sediment	117.8 mg/kg dwt	-
	Marine water sediment	56.5 mg/kg dwt	-
	Soil	35.6 mg/kg dwt	-
-methoxy-2-propanol	Fresh water	10 mg/l	-
	Marine water	1 mg/l	-
	Sewage Treatment	100 mg/l	-
	Plant		
	Fresh water sediment	52.3 mg/kg dwt	_
	Marine water sediment	5.2 mg/kg dwt	_
	Soil	4.59 mg/kg dwt	_
ylene	Fresh water	0.327 mg/l	_
,	Marine water	0.327 mg/l	_
	Sewage Treatment	6.58 mg/l	_
	Plant	0.00 mg/1	
	Fresh water sediment	12.46 mg/kg dwt	_
	Marine water sediment	12.46 mg/kg dwt	_
	Soil	2.31 mg/kg dwt	_
cyclohexanone	Fresh water	0.033 mg/l	
yolonexarione	Marine water	0.003 mg/l	
	Sewage Treatment	10 mg/l	-
	Plant	10 mg/i	-
	Fresh water sediment	0.168 mg/kg dwt	
	Marine water sediment	0.017 mg/kg dwt	-
	Soil	0.014 mg/kg dwt	-
thylbenzene	Fresh water	0.0 14 mg/kg dwt	-
tryiberizerie	Marine water	0.01 mg/l	-
	Sewage Treatment	9.6 mg/l	-
	Plant	9.0 mg/i	-
	Fresh water sediment	13.7 mg/kg dwt	
	Marine water sediment		-
	Soil	1.37 mg/kg dwt	-
a a a itu da wa		2.68 mg/kg dwt	-
nesitylene	Fresh water	0.101 mg/l	-
	Marine water	0.101 mg/l	-
	Sewage Treatment	2.02 mg/l	-
	Plant	7.00	
	Fresh water sediment	7.86 mg/kg dwt	-
	Marine water sediment	7.86 mg/kg dwt	-
	Soil	1.34 mg/kg dwt	-
1,2,4-trimethylbenzene	Fresh water	0.12 mg/l	-

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		1	
	Marine water	0.12 mg/l	-
	Sewage Treatment	2.41 mg/l	-
	Plant		
	Fresh water sediment	13.56 mg/kg dwt	_
	Marine water sediment	13.56 mg/kg dwt	_
	Soil		-
		2.34 mg/kg dwt	-
zinc oxide	Fresh water	20.6 μg/l	-
	Marine water	6.1 µg/l	-
	Fresh water sediment	117 mg/kg dwt	-
	Sewage Treatment	52 μg/l	-
	Plant		
	Marine water sediment	56.5 mg/kg dwt	_
	Soil	35.6 mg/kg dwt	_
othyl gootata	Fresh water	0.24 mg/l	
ethyl acetate			-
	Marine water	0.024 mg/l	-
	Sewage Treatment	650 mg/l	-
	Plant		
	Fresh water sediment	1.15 mg/kg dwt	-
	Marine water sediment	0.115 mg/kg dwt	_
	Soil	0.148 mg/kg dwt	_
		200 mg/kg	
n hutul agetete	Secondary Poisoning		<sup>-</sup>
n-butyl acetate	Fresh water	0.18 mg/l	-
	Marine	0.018 mg/l	-
	Sewage Treatment	35.6 mg/l	-
	Plant		
	Fresh water sediment	0.981 mg/kg dwt	-
	Marine water sediment	0.0981 mg/kg dwt	_
	Soil	0.0903 mg/kg dwt	
O month and A month dathed an atata			-
2-methoxy-1-methylethyl acetate	Fresh water	0.635 mg/l	-
	Marine	0.0635 mg/l	-
	Sewage Treatment	100 mg/l	-
	Plant		
	Fresh water sediment	3.29 mg/kg dwt	-
	Marine water sediment	0.329 mg/kg dwt	_
	Soil	0.29 mg/kg dwt	_
toluene	Fresh water	0.68 mg/l	
toluerie		0.00 mg/l	-
	Marine water	0.68 mg/l	-
	Sewage Treatment	13.61 mg/l	-
	Plant		
	Fresh water sediment	16.39 mg/kg dwt	-
	Marine water sediment	16.39 mg/kg dwt	-
	Soil	2.89 mg/kg dwt	_
cumene	Fresh water	0.035 mg/l	_
cumene			-
	Marine water	0.004 mg/l	-
	Sewage Treatment	200 mg/l	-
	Plant		
	Fresh water sediment	3.22 mg/kg dwt	-
	Marine water sediment	0.322 mg/kg dwt	-
	Soil	0.624 mg/kg dwt	-
naphthalene	Fresh water	2.4 µg/l	_
парпинанне			-
	Marine water	2.4 µg/l	<sup>-</sup>
	Sewage Treatment	2.9 mg/l	-
	Plant		
	Fresh water sediment	67.2 µg/kg dwt	-
	Marine water sediment	67.2 µg/kg dwt	-
	Soil	53.3 µg/kg dwt	-
benzene	Fresh water	1.9 mg/l	Sensitivity Distribution
55.126116	Marine water	1.9 mg/l	Sensitivity Distribution
	Sewage Treatment	39 mg/l	Sensitivity Distribution
	Plant		
	Fresh water sediment	33 mg/kg dwt	Equilibrium Partitioning
	Marine water sediment	33 mg/kg dwt	Equilibrium Partitioning
	Soil	4.8 mg/kg dwt	Equilibrium Partitioning

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## **SECTION 8: Exposure controls/personal protection**

#### 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. 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. Recommended: chemical splash goggles and/or face shield.

# 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. > 8 hours (breakthrough time): Recommended EN 374 fluor rubber foil >= 0.7 mm

< 1 hour (breakthrough time): Conditionally suitable materials for protective gloves; EN 374: Nitrile rubber - NBR (>= 0.35 mm). Only suitable as splash protection. Only suitable for brief exposure. In the event of contamination, change protective gloves immediately.

### **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. Recommended: Cotton or cotton/synthetic overalls or coveralls are normally suitable.

### 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. Recommended: EN 405:2001 + A1:2009 organic vapour (Type A) and particulate filter FFA2P3 R D

# **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.

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### SECTION 9: Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

### 9.1 Information on basic physical and chemical properties

**Appearance** 

Physical state : Liquid.
Colour : White.

Odour : Not available.

Odour threshold : Not available.

Melting point/freezing point : Not available.

Initial boiling point and : >100°C (>212°F)

boiling range

Flammability (solid, gas) : Not available.

Upper/lower flammability or explosive limits : Lower: 0.7%

Upper: 13.7%

Flash point : Closed cup: 31°C (87.8°F)

Auto-ignition temperature : 270°C (518°F)

Decomposition temperature : Not available.

pH : Not applicable.

Viscosity : Kinematic (40°C): >20.5 mm<sup>2</sup>/s

Solubility(ies) :

Media	Result
cold water	Not soluble
hot water	Not soluble

Solubility in water : Not available.

Partition coefficient: n-octanol/ : Not applicable.

water

Vapour pressure : 1.5 kPa (11.251 mm Hg) Evaporation rate : 0.8 (butyl acetate = 1)

**Relative density** : 1.59

Density: 1.59 g/cm³Vapour density: 3.1 [Air = 1]Explosive properties: Not available.Oxidising properties: Not available.

**Particle characteristics** 

Median particle size : Not applicable.

### 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 : Under no 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. Do not

allow vapour to accumulate in low or confined areas.

**10.5 Incompatible materials** : Reactive or incompatible with the following materials:

oxidising materials

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# **SECTION 10: Stability and reactivity**

10.6 Hazardous decomposition products

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

# **SECTION 11: Toxicological information**

# 11.1 Information on toxicological effects <u>Acute toxicity</u>

Product/ingredient name	Result	Species	Dose	Exposure
trizinc bis(orthophosphate)	LC50 Inhalation Dusts and	Rat	>5.7 mg/l	4 hours
	mists			
	LD50 Oral	Rat	>5000 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	2000 mg/kg	-
	LD50 Oral	Rat	4016 mg/kg	-
xylene	LC50 Inhalation Gas.	Rat	5000 ppm	4 hours
	LC50 Inhalation Vapour	Rat - Male	29000 mg/l	4 hours
	LD50 Dermal	Rabbit	12126 mg/kg	-
	LD50 Oral	Rat	4300 mg/kg	-
Solvent naphtha	LC50 Inhalation Vapour	Rat	6193 mg/m <sup>3</sup>	4 hours
(petroleum), light arom.	'			
(1	LD50 Dermal	Rabbit	>3160 mg/kg	_
	LD50 Oral	Rat	3592 mg/kg	_
cyclohexanone	LC50 Inhalation Vapour	Rat	8000 ppm	4 hours
- cyclendadione	LD50 Oral	Rat	1800 mg/kg	-
Trimethylbenzene	LD50 Oral	Rat	8970 mg/kg	_
ethylbenzene	LC50 Inhalation Vapour	Rat	6350 ppm	4 hours
Curyiberizerie	LD50 Dermal	Rabbit	12126 mg/kg	-
	LD50 Oral	Rat	3500 mg/kg	
mesitylene	LC50 Inhalation Vapour	Rat	24000 mg/m <sup>3</sup>	4 hours
Intestylene	LD50 Oral	Rat	5000 mg/kg	- 110uis
1,2,4-trimethylbenzene	LC50 Inhalation Vapour	Rat	18000 mg/m <sup>3</sup>	4 hours
1,2,4-uimeutyibenzene	LD50 Oral	Rat		4 110015
zinc oxide	LC50 Inhalation Dusts and	Rat	5 g/kg >5.7 mg/l	4 hours
ZITIC OXIGE	mists	Nat	25.7 mg/i	4 110015
	LD50 Dermal	Rat	>2000 mg/kg	
	LD50 Oral	Rat	>2000 mg/kg	-
-46.44-4-			>5000 mg/kg	4 5
ethyl acetate	LC50 Inhalation Vapour	Rat	1600 mg/l	4 hours
	LD50 Dermal	Rabbit	>20000 mg/kg	-
	LD50 Oral	Rat	5620 mg/kg	4 5
n-butyl acetate	LC50 Inhalation Gas.	Rat	390 ppm	4 hours
	LC50 Inhalation Vapour	Rat	>21.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>14112 mg/kg	-
	LD50 Oral	Rat	10760 mg/kg	-
2-methoxy-1-methylethyl acetate	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Dermal	Rat	>5000 mg/kg	-
	LD50 Oral	Rat	8532 mg/kg	-
toluene	LC50 Inhalation Vapour	Rat	28.1 mg/l	4 hours
	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	636 mg/kg	-
cumene	LC50 Inhalation Vapour	Rat	39000 mg/m <sup>3</sup>	4 hours
	LD50 Oral	Rat	1400 mg/kg	-
naphthalene	LD50 Dermal	Rabbit	>20 g/kg	-
	LD50 Dermal	Rat	>2500 mg/kg	-
	LD50 Oral	Rat	490 mg/kg	-
benzene	LD50 Dermal	Rabbit	>5000 mg/kg	-
	LD50 Oral	Rat	930 mg/kg	_
			שייישייי בייי	1

Conclusion/Summary
Acute toxicity estimates

: Not available.

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# **SECTION 11: Toxicological information**

Product/ingredient name	Oral (mg/ kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
FP401 Epoxy Primer DTM - White	N/A	15043.5	68379.7	184.5	N/A
1-methoxy-2-propanol	4016	N/A	N/A	N/A	N/A
xylene	4300	1100	5000	29000	N/A
Solvent naphtha (petroleum), light arom.	3592	N/A	N/A	N/A	N/A
cyclohexanone	N/A	N/A	N/A	11	N/A
Trimethylbenzene	8970	N/A	N/A	11	N/A
ethylbenzene	3500	12126	N/A	11	N/A
mesitylene	5000	N/A	N/A	24	N/A
1,2,4-trimethylbenzene	5000	N/A	N/A	18	N/A
ethyl acetate	5620	N/A	N/A	1600	N/A
n-butyl acetate	10760	N/A	N/A	N/A	N/A
2-methoxy-1-methylethyl acetate	8532	N/A	N/A	N/A	N/A
toluene	N/A	N/A	N/A	28.1	N/A
Reaction products of fatty acids, tall oil and fatty acids, C18 unsaturated, trimers and fatty acids, C18 unsaturated, dimers with (9Z)-octadec-9-en-1-amine.	500	N/A	N/A	N/A	N/A
cumene	N/A	N/A	N/A	39	N/A
naphthalene	490	N/A	N/A	N/A	N/A

### **Irritation/Corrosion**

Product/ingredient name	Result	Species	Score	Exposure	Observation
reaction product: bisphenol-A- (epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	Eyes - Mild irritant	Rabbit	-	100 mg	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 uL	-
	Skin - Severe irritant	Rabbit	-	24 hours 2	-
1-methoxy-2-propanol	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Mild irritant	Rabbit	_	500 mg	-
xylene	Eyes - Mild irritant	Rabbit	-	87 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 5 mg	-
	Skin - Mild irritant	Rat	_	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	_	100 %	-
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
Solvent naphtha (petroleum), light arom.	Eyes - Mild irritant	Rabbit	-	24 hours 100 uL	-
cyclohexanone	Eyes - Severe irritant	Rabbit	_	20 mg	_
-,	Eyes - Severe irritant	Rabbit	-	24 hours 250 ug	-
	Skin - Mild irritant	Human	-	48 hours 50 %	-
	Skin - Mild irritant	Rabbit	_	500 mg	_
Trimethylbenzene	Eyes - Mild irritant	Rabbit	_	24 hours 500	_
		1.15.2.5.1		mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 500 mg	-
ethylbenzene	Eyes - Severe irritant	Rabbit	_	500 mg	_
34.7.201120110	Skin - Mild irritant	Rabbit	_	24 hours 15	_
	Otto Wind inflant	TABBIT		mg	
mesitylene	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
	Skin - Moderate irritant	Rabbit	_	mg 24 hours 20	_

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# **SECTION 11: Toxicological information**

			_		
zinc oxide	Eyes - Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
	Skin - Mild irritant	Rabbit	-	24 hours 500	-
				milligrams	
n-butyl acetate	Eyes - Moderate irritant	Rabbit	_	100 mg	-
,	Skin - Moderate irritant	Rabbit	_	24 hours 500	_
				mg	
toluene	Eyes - Mild irritant	Rabbit	_	0.5 minutes	-
				100 mg	
	Eyes - Mild irritant	Rabbit	_	870 ug	_
	Eyes - Severe irritant	Rabbit	_	24 hours 2	_
	Lyos sovers irritant	rabbit		mg	
	Skin - Mild irritant	Pig	_	24 hours 250	_
	OKIT WING ITHLATE	' '9		uL	
	Skin - Mild irritant	Rabbit	_	435 mg	_
	Skin - Moderate irritant	Rabbit	_	24 hours 20	-
	OKIT - Moderate IIIItarit	Rabbit	_	mg	_
	Skin - Moderate irritant	Rabbit		500 mg	
aumana	Eyes - Mild irritant	Rabbit	_	24 hours 500	- -
cumene	Eyes - Milia irritarit	Rabbit	_		-
	Even Mild irritant	Rabbit		mg	
	Eyes - Mild irritant Skin - Mild irritant	Rabbit	_	86 mg 24 hours 10	-
	SKIII - WIIIU IITIIAITI	Rabbit	_		-
	Oldin Madauata imitaut	Dalakit		mg	
	Skin - Moderate irritant	Rabbit	-	24 hours 100	-
	Olain Milal innit and	Dalakit		mg	
naphthalene	Skin - Mild irritant	Rabbit	-	495 mg	-
	Skin - Severe irritant	Rabbit	-	24 hours	-
				0.05 MI	
benzene	Eyes - Moderate irritant	Rabbit	-	88 mg	-
	Eyes - Severe irritant	Rabbit	-	24 hours 2	-
		<b>_</b>		mg	
	Skin - Mild irritant	Rabbit	-	24 hours 15	-
		1		mg	
	Skin - Mild irritant	Rat	-	8 hours 60 uL	-
	Skin - Moderate irritant	Rabbit	-	24 hours 20	-
				mg	
Conclusion/Summary	: Not available.				
- Choladion Janimary					

**Sensitisation** 

**Conclusion/Summary** : Not available.

**Mutagenicity** 

**Conclusion/Summary** : Not available.

**Carcinogenicity** 

It has been observed that the carcinogenic hazard of this product arises when respirable dust is inhaled in quantities leading to significant impairment of particle clearance mechanisms in the lung.

**Conclusion/Summary** : Not available.

**Reproductive toxicity** 

**Conclusion/Summary** : Not available.

**Teratogenicity** 

**Conclusion/Summary** : Not available. Specific target organ toxicity (single exposure)

Product/ingredient name	Category	Route of exposure	Target organs

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# **SECTION 11: Toxicological information**

1-methoxy-2-propanol	Category 3	-	Narcotic effects
Solvent naphtha (petroleum), light arom.	Category 3	-	Respiratory tract
			irritation
	Category 3		Narcotic effects
mesitylene	Category 3	-	Respiratory tract
			irritation
1,2,4-trimethylbenzene	Category 3	-	Respiratory tract
			irritation
ethyl acetate	Category 3	-	Narcotic effects
1,2,3-trimethylbenzene	Category 3	-	Respiratory tract
			irritation
n-butyl acetate	Category 3	-	Narcotic effects
2-methoxy-1-methylethyl acetate	Category 3	-	Narcotic effects
toluene	Category 3	-	Narcotic effects
cumene	Category 3	-	Respiratory tract
			irritation

### Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
toluene	Category 2 Category 2 Category 2	-	hearing organs - immune system, intestines, liver
benzene	Category 1	-	-

### **Aspiration hazard**

Product/ingredient name	Result
Solvent naphtha (petroleum), light arom.	ASPIRATION HAZARD - Category 1
Trimethylbenzene	ASPIRATION HAZARD - Category 1
ethylbenzene	ASPIRATION HAZARD - Category 1
toluene	ASPIRATION HAZARD - Category 1
cumene	ASPIRATION HAZARD - Category 1
benzene	ASPIRATION HAZARD - Category 1

**Information on likely routes**: Not available.

of exposure

Potential acute health effects

**Eye contact** : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

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

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 : No specific data.

**Skin contact** : Adverse symptoms may include the following:

> irritation redness

Ingestion : No specific data.

### Delayed and immediate effects as well as chronic effects from short and long-term exposure **Short term exposure**

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# **SECTION 11: Toxicological information**

**Potential immediate** 

effects

: Not available.

Potential delayed effects : Not available.

**Long term exposure** 

**Potential immediate** 

: Not available.

effects

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

**Conclusion/Summary** : Not available.

**General** : Once sensitized, a severe allergic reaction may occur when subsequently exposed

to very low levels.

Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. Reproductive toxicity : No known significant effects or critical hazards.

Other information : Not available.

# **SECTION 12: Ecological information**

### 12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
trizinc bis(orthophosphate)	Acute EC50 63.1 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 90 μg/l Fresh water	Fish - Rainbow trout,donaldson	96 hours
		trout - Oncorhynchus mykiss	
1-methoxy-2-propanol	Acute EC50 >1000 mg/l	Aquatic plants - Selenastrum	96 hours
		capricornutum	
	Acute EC50 >21000 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 6812 mg/l	Fish - Leuciscus idus	96 hours
xylene	Acute EC50 1 to 10 mg/l	Algae	72 hours
	Acute EC50 1 to 10 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 8500 μg/l Marine water	Crustaceans - Daggerblade	48 hours
		grass shrimp - Palaemonetes	
		pugio	
	Acute LC50 13400 μg/l Fresh water	Fish - Fathead minnow -	96 hours
		Pimephales promelas	
Solvent naphtha (petroleum),	Acute EC50 2.9 mg/l	Algae - Pseudokirchneriella	72 hours
light arom.		subcapitata	
	Acute EC50 3.2 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 9.2 mg/l	Fish - Oncorhynchus mykiss	96 hours
	Acute NOEC >1 mg/l	Algae - Pseudokirchneriella	72 hours
		subcapitata	
cyclohexanone	Acute EC50 32.9 mg/l	Algae - Green algae -	72 hours
		Chlamydomonas reinhardtii -	
		Exponential growth phase	
	Acute LC50 527000 µg/l Fresh water	Fish - Fathead minnow -	96 hours
		Pimephales promelas	
	Chronic EC10 3.56 mg/l	Algae - Green algae -	72 hours
		Chlamydomonas reinhardtii -	
		Exponential growth phase	
Trimethylbenzene	Acute LC50 5600 µg/l Marine water	Crustaceans - Daggerblade	48 hours
		grass shrimp - <i>Palaemonetes</i>	
		pugio	
ethylbenzene	Acute EC50 4900 μg/l Marine water	Algae - Diatom - Skeletonema	72 hours
		costatum	
	Acute EC50 7700 μg/l Marine water	Algae - Diatom - Skeletonema	96 hours
		costatum	40.1
	Acute EC50 6.53 mg/l Marine water	Crustaceans - Brine shrimp -	48 hours
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			T
		Artemia sp Nauplii	
	Acute EC50 2.93 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
		magna - Neonate	
	Acute LC50 4200 µg/l Fresh water	Fish - Rainbow trout,donaldson	96 hours
		trout - Oncorhynchus mykiss	
mesitylene	Acute LC50 13000 μg/l Marine water	Crustaceans - Dungeness or	48 hours
moonyione	Troute 2000 10000 µg/1 Marine Water	edible crab - Cancer magister -	10 Hours
		Zoea	
	Agusto I CEO 12520 ug/l Freeb weter		96 hours
	Acute LC50 12520 μg/l Fresh water	Fish - Goldfish - Carassius	96 Hours
		auratus	<b> </b>
	Chronic NOEC 0.4 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	21 days
		magna	
1,2,4-trimethylbenzene	Acute LC50 4910 µg/l Marine water	Crustaceans - Scud -	48 hours
		Elasmopus pectenicrus - Adult	
	Acute LC50 7720 μg/l Fresh water	Fish - Fathead minnow -	96 hours
	10	Pimephales promelas	
zinc oxide	Acute EC50 0.17 mg/l	Algae - Selenastrum	72 hours
ZITIC OXIGE	Addic E000 0.17 mg/l	capricornutum	72 110013
	A custo I CEO 220 mmm		00 have
	Acute LC50 320 ppm	Fish - Lepomis macrochirus	96 hours
	Chronic NOEC 0.017 mg/l	Algae - Pseudokirchneriella	72 hours
		subcapitata	
ethyl acetate	Acute EC50 2500000 µg/l Fresh water	Algae - Green algae -	96 hours
		Selenastrum sp.	
	Acute LC50 750000 µg/l Fresh water	Crustaceans - Scud -	48 hours
		Gammarus pulex	
	Acute LC50 154000 µg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
	7 todio 2000 10 1000 µg/11 10011 water	cucullata	10 Hours
	Aguta I CEO 212E00 ug/l Freeb water	Fish - Indian catfish -	96 hours
	Acute LC50 212500 µg/l Fresh water		96 Hours
		Heteropneustes fossilis	
	Acute NOEC >100 mg/l	Algae - Desmodesmus	72 hours
		subspicatus	
	Chronic NOEC 2.4 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	21 days
		magna	
	Chronic NOEC 75.6 mg/l Fresh water	Fish - Fathead minnow -	32 days
	g	Pimephales promelas - Embryo	0,0
n-butyl acetate	Acute EC50 397 mg/l	Algae - Selenastrum	72 hours
III-batyi acctate	Acute 2000 007 mg/l	capricornutum	7 Z Hours
	Aguto FCEO 44 mg/l		10 hours
	Acute EC50 44 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 32 mg/l Marine water	Crustaceans - Brine shrimp -	48 hours
		Artemia salina	
	Acute LC50 18 mg/l	Fish - Pimephales promelas	96 hours
	Acute NOEC 200 mg/l	Algae	72 hours
2-methoxy-1-methylethyl	Acute EC50 >1000 mg/l	Algae - Pseudokirchnerella	96 hours
acetate		subcapitata	
	Acute EC50 408 mg/l	Daphnia - Daphnia - <i>Daphnia</i>	48 hours
		magna Daprima Daprima	
	Acute LC50 134 mg/l	Fish - Oncorhynchus mykiss	96 hours
toluene	Acute EC50 134 mg/l		72 hours
loluelle		Algae Dietem Skeleteneme	
	Acute EC50 >433 ppm Marine water	Algae - Diatom - Skeletonema	96 hours
		costatum	
	Acute EC50 11600 μg/l Fresh water	Crustaceans - Scud -	48 hours
		Gammarus pseudolimnaeus -	
		Adult	
	Acute EC50 3.8 mg/l	Daphnia - <i>Daphnia magna</i>	48 hours
	Acute LC50 5.5 mg/l	Fish - Oncorhynchus kisutch	96 hours
	Chronic NOEC 1 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	21 days
	Somo Nozo i mg/i i rosii watei	magna	Lidays
cumono	Acuto EC50 7.4 mg/l Maring water	I — —	19 hours
cumene	Acute EC50 7.4 mg/l Marine water	Crustaceans - Brine shrimp -	48 hours
		Artemia sp Nauplii	1.0.
	Acute EC50 10.6 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
		magna - Neonate	
	Acute LC50 2700 µg/l Fresh water	Fish - Rainbow trout,donaldson	96 hours
		trout - Oncorhynchus mykiss	
naphthalene	Acute EC50 1.6 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	48 hours
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	magna - Neonate	
Acute LC50 2350 μg/l Marine water	Crustaceans - Daggerblade	48 hours
	grass shrimp - <i>Palaemonetes</i>	
	pugio	
Acute LC50 213 μg/l Fresh water	•	96 hours
Chronic NOEC 0.5 mg/l Marine water		3 weeks
Chronic NOEC 1.5 mg/l Fresh water		60 days
Acute EC50 1600000 µg/I Fresh water		96 hours
A t - F050 0 00 // F l t		40 1
Acute EC50 9.23 mg/l Fresh water		48 hours
A t - 1 OFO Od // Marin t	1 • •	40 5
Acute LC50 21 mg/l Marine water		48 hours
Acute I C50 5 28 ul/L Fresh water	1	96 hours
7.6016 E000 0.20 di/E i 16011 Water		oo noars
Chronic EC10 >1360 mg/l Fresh water		96 hours
Ğ	Desmodesmus subspicatus	
Chronic NOEC 98 mg/l Fresh water	Daphnia - Water flea - <i>Daphnia</i>	21 days
_	magna	
Chronic NOEC 1.5 to 5.4 ul/L Marine	Fish - Striped bass - Morone	4 weeks
water	saxatilis - Juvenile (Fledgling,	
	Hatchling, Weanling)	
	Acute LC50 213 µg/l Fresh water  Chronic NOEC 0.5 mg/l Marine water  Chronic NOEC 1.5 mg/l Fresh water  Acute EC50 1600000 µg/l Fresh water  Acute EC50 9.23 mg/l Fresh water  Acute LC50 21 mg/l Marine water  Acute LC50 5.28 ul/L Fresh water  Chronic EC10 >1360 mg/l Fresh water  Chronic NOEC 98 mg/l Fresh water  Chronic NOEC 1.5 to 5.4 ul/L Marine	Acute LC50 2350 µg/l Marine water  Acute LC50 213 µg/l Fresh water  Acute LC50 213 µg/l Fresh water  Acute LC50 213 µg/l Fresh water  Chronic NOEC 0.5 mg/l Marine water  Chronic NOEC 1.5 mg/l Fresh water  Chronic NOEC 1.5 mg/l Fresh water  Acute EC50 1600000 µg/l Fresh water  Acute EC50 9.23 mg/l Fresh water  Acute LC50 21 mg/l Marine water  Acute LC50 21 mg/l Marine water  Acute LC50 5.28 ul/L Fresh water  Crustaceans - Fiddler crab - Uca pugnax - Adult  Fish - Mozambique tilapia - Oreochromis mossambicus  Algae - Green algae - Selenastrum sp.  Daphnia - Water flea - Daphnia magna - Neonate  Crustaceans - Brine shrimp - Artemia salina  Fish - Pink salmon - Oncorhynchus gorbuscha - Fry  Algae - Green algae - Desmodesmus subspicatus  Daphnia - Water flea - Daphnia magna  Chronic NOEC 98 mg/l Fresh water  Crustaceans - Brine shrimp - Artemia salina  Fish - Pink salmon - Oncorhynchus gorbuscha - Fry  Algae - Green algae - Desmodesmus subspicatus  Daphnia - Water flea - Daphnia magna  Fish - Striped bass - Morone saxatilis - Juvenile (Fledgling,

**Conclusion/Summary**: Not available.

### 12.2 Persistence and degradability

Product/ingredient name	Test	Result	Dose	Inoculum
1-methoxy-2-propanol	OECD 301E 301E Ready Biodegradability - Modified OECD Screening Test	96 % - 28 days	-	-
Solvent naphtha (petroleum), light arom.	_	78 % - Readily - 28 days	-	Fresh water
n-butyl acetate	OECD 301D Ready Biodegradability - Closed Bottle Test	>80 % - 5 days	-	-
2-methoxy-1-methylethyl acetate	OECD 302B Inherent Biodegradability: Zahn-Wellens/ EMPA Test	100 % - 28 days	-	-
	OECD 301F Ready Biodegradability - Manometric Respirometry Test	83 % - 28 days	-	-

**Conclusion/Summary**: Not available.

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Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
1-methoxy-2-propanol	-	-	Readily
Solvent naphtha (petroleum),	-	-	Readily
light arom.			
n-butyl acetate	-	-	Readily
2-methoxy-1-methylethyl	-	-	Readily
acetate			
toluene	-	-	Readily

### 12.3 Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential	
reaction product: bisphenol- A-(epichlorhydrin); epoxy resin (number average molecular weight ≤ 700)	2.64 to 3.78	31	Low	
trizinc bis(orthophosphate)	_	60960	High	
1-methoxy-2-propanol	<1	-	Low	
xylene	3.12	8.1 to 25.9	Low	
Solvent naphtha (petroleum),	-	10 to 2500	High	
light arom.		1000		
cyclohexanone	0.86	-	Low	
Trimethylbenzene	3.4 to 3.8	-	Low	
ethylbenzene	3.6	-	Low	
mesitylene	3.42	161	Low	
1,2,4-trimethylbenzene	3.63	243	Low	
zinc oxide	-	28960	High	
ethyl acetate	0.68	30	Low	
1,2,3-trimethylbenzene	3.66	194.98	Low	
n-butyl acetate	2.3	-	Low	
2-methoxy-1-methylethyl	1.2	-	Low	
acetate				
toluene	2.73	90	Low	
cumene	3.55	35.48	Low	
naphthalene	3.4	36.5 to 168	Low	
benzene	2.13	11	Low	

### 12.4 Mobility in soil

Soil/water partition coefficient (Koc)

: Not available.

Mobility : Not available.

### 12.5 Results of PBT and vPvB assessment

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

**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

**Product** 

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## **SECTION 13: Disposal considerations**

### **Methods of disposal**

The generation of waste should be avoided or minimised 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.

### **Hazardous waste**

: Yes.

### Waste catalogue

Waste code	Waste designation
08 01 11*	waste paint and varnish containing organic solvents or other hazardous substances

#### **Packaging**

**Methods of disposal** 

: 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.

#### **Special precautions**

: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapour from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

## **SECTION 14: Transport information**

	ADR/RID	ADN	IMDG	IATA
14.1 UN number	UN1263	UN1263	UN1263	UN1263
14.2 UN proper shipping name	PAINT	PAINTPAINT	PAINT	Paint
14.3 Transport hazard class(es)	3	3	3	3
14.4 Packing group	III	III	III	III
14.5 Environmental hazards	Yes.	Yes.	Yes.	Yes. The environmentally hazardous substance mark is not required.

#### **Additional information**

**ADR/RID** 

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 ka.

Hazard identification number 30

**Limited quantity** 5 L

**Special provisions** 163, 640E, 650, 367

Tunnel code (D/E)

ADN

: The environmentally hazardous substance mark is not required when transported in sizes of ≤5 L or ≤5 kg.

**Special provisions** 163, 367, 640E, 650

**IMDG** 

: The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.

Emergency schedules F-E, \_S-E\_ Special provisions 163, 223, 367, 955

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## SECTION 14: Transport information

**IATA** 

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

**Quantity limitation** Passenger and Cargo Aircraft: 60 L. Packaging instructions: 355. Cargo Aircraft Only: 220 L. Packaging instructions: 366. Limited Quantities -Passenger Aircraft: 10 L. Packaging instructions: Y344.

Special provisions A3, A72, A192

user

14.6 Special precautions for : 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 Transport in bulk according to IMO instruments

: Not available.

: Not applicable.

# **SECTION 15: Regulatory information**

### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture **UK (GB)/REACH**

### Annex XIV - List of substances subject to authorisation

### **Annex XIV**

None of the components are listed.

### Substances of very high concern

None of the components are listed.

### **Ozone depleting substances**

Not listed.

### **Prior Informed Consent (PIC)**

Not listed.

#### **Persistent Organic Pollutants**

Not listed.

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

### **Seveso Directive**

This product is controlled under the Seveso Directive.

### **Danger criteria**

### Category P5c

E1

### **National regulations**

Product/ingredient name	List name	Name on list	Classification	Notes
benzene	UK Occupational Exposure Limits EH40 - WEL	benzene; benzol	Carc.	-

#### **EU** regulations

**Industrial emissions** (integrated pollution prevention and control) -

: Not listed

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### SECTION 15: Regulatory information

**Industrial emissions** (integrated pollution

prevention and control) -

Water

### International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

: Not listed

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.

### **Inventory list**

**Australia** : All components are listed or exempted.

Canada : Not determined. China : Not determined.

Eurasian Economic Union: Russian Federation inventory: Not determined.

: Japan inventory (CSCL): Not determined. **Japan** 

Japan inventory (ISHL): Not determined.

**New Zealand** : All components are listed or exempted.

**Philippines** : Not determined. Republic of Korea : Not determined. **Taiwan** : Not determined. **Thailand** : Not determined. Turkey : Not determined. **United States** : Not determined. **Viet Nam** : Not determined.

15.2 Chemical safety

assessment

### **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and** 

acronyms

: ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and

Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019

This product contains substances for which Chemical Safety Assessments are still

No. 720 and amendments

DMEL = Derived Minimal Effect Level DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

### Procedure used to derive the classification

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# **SECTION 16: Other information**

Classification	Justification
Flam. Liq. 3, H226	On basis of test data
Skin Irrit. 2, H315	Calculation method
Eye Irrit. 2, H319	Calculation method
Skin Sens. 1, H317	Calculation method
Aquatic Acute 1, H400	Calculation method
Aquatic Chronic 1, H410	Calculation method

### **Full text of abbreviated H statements**

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H340	May cause genetic defects.
H350	May cause cancer.
H351	Suspected of causing cancer.
H361d	Suspected of damaging the unborn child.
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**

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	
Carc. 1A	CARCINOGENICITY - Category 1A	
Carc. 1B	CARCINOGENICITY - Category 1B	
Carc. 2	CARCINOGENICITY - Category 2	
Eye Irrit. 2	SERIOUS EYE DAMAGE/EYE IRRITATION - Category 2	
Flam. Liq. 2	FLAMMABLE LIQUIDS - Category 2	
Flam. Liq. 3	FLAMMABLE LIQUIDS - Category 3	
Muta. 1B	GERM CELL MUTAGENICITY - Category 1B	
Repr. 2	REPRODUCTIVE TOXICITY - Category 2	
Skin Irrit. 2	SKIN CORROSION/IRRITATION - Category 2	
Skin Sens. 1	SKIN SENSITISATION - Category 1	
Skin Sens. 1A	SKIN SENSITISATION - Category 1A	
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	

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### **SECTION 16: Other information**

To the best of our knowledge, the information contained herein is accurate. However, neither the abovenamed supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

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# SUMI Safe Use of Mixtures Information for end-users



Title : Professional spray painting, near-industrial setting

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

# **Operational conditions**

Place of use : Indoor use

# Risk management measures (RMM)

Contributing activity	Process category	Maximum	Ventilation		
	(ies)	duration	Type	ach (air changes per hour)	
Preparation of material for application	PROC05		Enhanced (mechanical) room ventilation	5 - 10	
Loading of application equipment and handling of coated parts before curing	PROC08a		Enhanced (mechanical) room ventilation	5 - 10	
Professional application of coatings and inks by spraying	PROC11	More than 4 hours	Local exhaust ventilation	Refer to relevant technical standards	
Film formation - force drying, stoving and other technologies	PROC04		Enhanced (mechanical) room ventilation	Refer to relevant technical standards	
Cleaning	PROC05		Enhanced (mechanical) room ventilation	5 - 10	
Waste management	PROC08a		Enhanced (mechanical) room ventilation	5 - 10	
Contributing activity	Process category (ies)	Respiratory	Eye	Hands	
Preparation of material for application	PROC05	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	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.	
Professional application of coatings and inks by spraying	PROC11	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	Wear a respirator conforming to EN140 with an assigned protection factor of at least 10.	None	None	
Cleaning	PROC05	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.	
Waste management	PROC08a	None	Use eye protection according to EN 166.	Wear suitable gloves tested to EN374.	

See chapter 8 of this Safety Data Sheet for specifications.

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### **Disclaimer**

The information in this Safe Use of Mixture Information sheet is based on the data provided by the substance supplier for the substances in the product for which a chemical safety assessment has been carried out at the time of issue. It does not guarantee safe use of the product and does not replace any occupational risk assessment required by legislation. When developing workplace instructions for employees, SUMI sheets should always be considered in combination with the SDS and the label of the product.

No liability is accepted for any damage, no matter of what kind, which is direct or indirect consequence of acts and/or decisions (partly) based on the contents of this document.