

## SAFETY DATA SHEET

## 210401-001 - NowoMetal - Roof 2-K PU Combi SB

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

## 1.1. Product identifier

## Trade name

210401-001 - NowoMetal - Roof 2-K PU Combi SB

## Unique formula identifier (UFI)

FFGA-6HJN-GA5E-U31E

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

## ▼ Relevant identified uses of the substance or mixture

Paint for metal surfaces

Restricted to professional and industrial use.

## Uses advised against

None known.

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

## Company and address

**NOWOCOAT INDUSTRIAL A/S**

Stålvvej 3

6000 Kolding

Denmark

Tel: +45 7550 1111

## E-mail

mail@nowocoat.dk

## Revision

25/11/2025

## SDS Version

6.0

## Date of previous version

20/10/2025 (5.0)

## 1.4. Emergency telephone number

Healthcare professionals: Dial 0344 892 0111 to reach The National Poisons Information Service (NPIS) (24 hour service)

General public:

England - Dial 111 to reach NHS 111 (24 hour service)

Scotland - Dial 111 to reach NHS 24 (24 hour service)

Wales - Dial 111 or 0845 4647 to reach NHS Direct (24 hour service)

See section 4 "First aid measures".

## SECTION 2: Hazards identification

Classified according to Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

## 2.1. ▼ Classification of the substance or mixture

Flam. Liq. 3; H226, Flammable liquid and vapour.

Asp. Tox. 1; H304, May be fatal if swallowed and enters airways.

Eye Irrit. 2; H319, Causes serious eye irritation.

Aquatic Chronic 2; H411, Toxic to aquatic life with long lasting effects.

## 2.2. Label elements

▼ Hazard pictogram(s)



Signal word

Danger

▼ Hazard statement(s)

- Flammable liquid and vapour. (H226)
- May be fatal if swallowed and enters airways. (H304)
- Causes serious eye irritation. (H319)
- Toxic to aquatic life with long lasting effects. (H411)

Precautionary statement(s)

General

Not applicable.

Prevention

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. (P210)
- Wear eye protection/protective gloves/protective clothing. (P280)

Response

- IF SWALLOWED: Immediately call a POISON CENTER/doctor. (P301+P310)
- Do NOT induce vomiting. (P331)

Storage

Store in a well-ventilated place. Keep cool. (P403+P235)

Disposal

Dispose of contents/container in accordance with local regulation. (P501)

Hazardous substances

- Xylene
- Ethylbenzene

Additional labelling

EUH208, Contains Methyl methacrylate. May produce an allergic reaction.

UFI: FFGA-6HJN-GA5E-U31E

Waste disposal:

Paint and cleaning fluid must not be disposed of in drains, but collected and disposed of as environmental waste.

VOC

- VOC content: <320 g/L
- MAXIMUM VOC CONTENT (Phase II, category A/j (SB): 500 g/L)

2.3. Other hazards

Additional warnings

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification. This product does not contain any substances considered to be endocrine disruptors in accordance with the criteria set out in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2023/707.

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable. This product is a mixture.

3.2. ▼ Mixtures

Product/substance	Identifiers	% w/w	Classification	Note
n-Butyl acetate	CAS No.: 123-86-4 EC No.: 204-658-1 UK-REACH:	5-10%	EUH066 Flam. Liq. 3, H226 STOT SE 3, H336	[1]

	Index No.: 607-025-00-1			
Xylene	CAS No.: 1330-20-7 EC No.: 215-535-7 UK-REACH: Index No.: 601-022-00-9	5-10%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 Acute Tox. 4, H312 Skin Irrit. 2, H315 Eye Irrit. 2, H319 Acute Tox. 4, H332 STOT SE 3, H335 STOT RE 2, H373 Aquatic Chronic 3, H412	[1]
Ethylbenzene	CAS No.: 100-41-4 EC No.: 202-849-4 UK-REACH: Index No.: 601-023-00-4	1-3%	Flam. Liq. 2, H225 Asp. Tox. 1, H304 Acute Tox. 4, H332 STOT RE 2, H373	[1]
Trizinc bis(orthophosphate)	CAS No.: 7779-90-0 EC No.: 231-944-3 UK-REACH: Index No.: 030-011-00-6	1-3%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
3-(2,3-Epoxypropoxy)propyl]trimethoxysilane	CAS No.: 2530-83-8 EC No.: 219-784-2 UK-REACH: Index No.:	1-3%	Eye Dam. 1, H318 Eye Irrit. 2, H319 (SCL: 1.00 %) Aquatic Chronic 3, H412	
Zinc oxide	CAS No.: 1314-13-2 EC No.: 215-222-5 UK-REACH: Index No.: 030-013-00-7	<1%	Aquatic Acute 1, H400 (M=1) Aquatic Chronic 1, H410 (M=1)	
Methyl methacrylate	CAS No.: 80-62-6 EC No.: 201-297-1 UK-REACH: Index No.: 607-035-00-6	<0.25%	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	[1]
Cumene	CAS No.: 98-82-8 EC No.: 202-704-5 UK-REACH: Index No.: 601-024-00-X	<0.0015%	Flam. Liq. 3, H226 Asp. Tox. 1, H304 STOT SE 3, H335 Carc. 1B, H350 Aquatic Chronic 2, H411	[1]

See full text of H-phrases in section 16. Occupational exposure limits are listed in section 8, if these are available.

#### Other information

[1] European occupational exposure limit.

[3] According to UK REACH, Annex XVII, the substance is subject to restrictions.

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

#### Inhalation

Upon breathing difficulties or irritation of the respiratory tract: Bring the person into fresh air and stay with him/her.

#### Skin contact

Remove contaminated clothing and shoes immediately. Ensure to wash exposed skin thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

If skin irritation occurs: Get medical advice/attention.

#### Eye contact

If in eyes: Flush eyes immediately with plenty of water or isotonic water (20-30 °C) for at least 5 minutes and continue until irritation stops. Remove contact lenses. Make sure to flush under upper and lower eyelids. If irritation continues, contact a doctor. Continue flushing during transport.

#### Ingestion

IF SWALLOWED: Immediately call a POISON CENTER/doctor.

Do not induce vomiting! If vomiting occurs, keep head facing down so that vomit does not get into the lungs. Call a doctor or ambulance. Symptoms of chemical pneumonia can appear after several hours. People who have swallowed the product should therefore be kept under medical attention for at least 48 hours.

#### Burns

Rinse with water until pain stops then continue to rinse for 30 minutes.

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

This product contains substances that can cause chemical pneumonia if swallowed. Symptoms of chemical pneumonia may appear after several hours.

Sensitisation: This product contains substances, which may trigger allergic reaction upon dermal contact.

Manifestation of allergic reactions typically takes place within 12-72 hours after exposure.

#### 4.3. Indication of any immediate medical attention and special treatment needed

IF exposed or concerned:

Get immediate medical advice/attention.

#### Information to medics

Bring this safety data sheet or the label from this product.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media: Alcohol-resistant foam, carbon dioxide, powder, water mist.

Unsuitable extinguishing media: Waterjets should not be used, since they can spread the fire.

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

Flammable liquid and vapour.

In use may form flammable/explosive vapour-air mixture.

Fire will result in dense smoke. Exposure to combustion products may harm your health. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous decomposition compounds are produced. These are:

Carbon oxides (CO / CO<sub>2</sub>)

Some metal oxides

#### 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

### SECTION 6: Accidental release measures

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

Storages not yet ignited must be cooled by water mist. Remove flammable materials if conditions allow it. Ensure sufficient ventilation.

Avoid direct contact with spilled substances.

Ensure adequate ventilation, especially in confined areas.

Contaminated areas may be slippery.

#### 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities.

### 6.3. Methods and material for containment and cleaning up

Limit spillage and collect using granular absorbent or similar materials, and dispose of it in accordance with the regulations on dangerous waste.

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.

Wherever possible cleaning should be performed with normal cleaning agents. Avoid use of solvents.

### 6.4. Reference to other sections

See section 13 "Disposal considerations" on handling of waste.

See section 8 "Exposure controls/personal protection" for protective measures.

## SECTION 7: Handling and storage

### 7.1. ▼ Precautions for safe handling

Ground and bond container and receiving equipment.

Use explosion-proof electrical/lighting/ventilating equipment.

Use non-sparking tools.

Take action to prevent static discharges.

It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

Avoid direct contact with the product.

Avoid contact during pregnancy and while nursing.

Smoking, drinking and consumption of food is not allowed in the work area.

See section 8 "Exposure controls/personal protection" for information on personal protection.

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

Store in tightly closed containers and store protected from moisture and light. Containers should be dated when opened and tested periodically for the presence of peroxides. Do not exceed storage time limits.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Take action to prevent static discharges.

Must be stored in a cool and well-ventilated area, away from possible sources of ignition.

#### Recommended storage material

Always store in containers of the same material as the original container.

#### Storage conditions

No specific requirements.

#### Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

n-Butyl acetate

Long term exposure limit (8 hours) (ppm): 150

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 724

Short term exposure limit (15 minutes) (ppm): 200

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 966

Xylene

Long term exposure limit (8 hours) (ppm): 50

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 220

Short term exposure limit (15 minutes) (ppm): 100

Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 441

Annotations:

BMVG = Biological Monitoring Guidance Value exists

Sk = Can be absorbed through the skin and lead to systemic toxicity.

Ethylbenzene

Long term exposure limit (8 hours) (ppm): 100  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 441  
 Short term exposure limit (15 minutes) (ppm): 125  
 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 552

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

Methyl methacrylate

Long term exposure limit (8 hours) (ppm): 50  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 208  
 Short term exposure limit (15 minutes) (ppm): 100  
 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 416

Magnesium carbonate

Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 10(inhalable)/4(respirable)

n-Butyl acrylate

Long term exposure limit (8 hours) (ppm): 1  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 5  
 Short term exposure limit (15 minutes) (ppm): 5  
 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 26

Toluene

Long term exposure limit (8 hours) (ppm): 50  
 Long term exposure limit (8 hours) (mg/m<sup>3</sup>): 191  
 Short term exposure limit (15 minutes) (ppm): 100  
 Short term exposure limit (15 minutes) (mg/m<sup>3</sup>): 384

Annotations:

Sk = Can be absorbed through the skin and lead to systemic toxicity.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677 The Stationery Office 2002.  
 EH40/2005 Workplace exposure limits (Fourth Edition 2020).

**DNEL**

3-(2,3-Epoxypropoxy)propyl]trimethoxysilane

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	5 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	10 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	17 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	70.5 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	5 mg/kg bw/day

Ethylbenzene

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - Workers	Dermal	180 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	15 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	77 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	293 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	1.6 mg/kg bw/day

Methyl methacrylate

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Local effects - General population	Dermal	1.5 mg/cm <sup>2</sup>
Long term – Local effects - Workers	Dermal	1.5 mg/cm <sup>2</sup>
Long term – Systemic effects - General population	Dermal	8.2 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	13.67 mg/kg bw/day
Short term – Local effects - General population	Dermal	1.5 mg/cm <sup>2</sup>
Short term – Local effects - Workers	Dermal	1.5 mg/cm <sup>2</sup>
Long term – Local effects - General population	Inhalation	104 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	208 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	74.3 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	348.4 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	208 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	416 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	8.2 mg/kg bw/day

n-Butyl acetate

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	6 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Short term – Systemic effects - General population	Dermal	6 mg/kg bw/day
Short term – Systemic effects - Workers	Dermal	11 mg/kg bw/day
Long term – Local effects - General population	Inhalation	35.7 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	300 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	35.7 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	300 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	300 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	600 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	300 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	600 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	2 mg/kg bw/day
Short term – Systemic effects - General population	Oral	2 mg/kg bw/day

n-Butyl acrylate

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Local effects - Workers	Inhalation	11 mg/m <sup>3</sup>

Toluene

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	226 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	384 mg/kg bw/day
Long term – Local effects - General population	Inhalation	56.5 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	192 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	56.5 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	192 mg/m <sup>3</sup>

According to EC-Regulation 1907/2006 (REACH), annex II, including changes implemented by EC-Regulation 2020/878

Short term – Local effects - General population	Inhalation	226 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	384 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	226 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	384 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	8.13 mg/kg bw/day

#### Trizinc bis(orthophosphate)

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	83 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	83 mg/kg bw/day
Long term – Systemic effects - General population	Inhalation	2.5 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	5 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	0.83 mg/kg bw/day

#### Xylene

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	125 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	212 mg/kg bw/day
Long term – Local effects - General population	Inhalation	65,3 mg/m <sup>3</sup>
Long term – Local effects - Workers	Inhalation	221 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	65,3 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	221 mg/m <sup>3</sup>
Short term – Local effects - General population	Inhalation	260 mg/m <sup>3</sup>
Short term – Local effects - Workers	Inhalation	442 mg/m <sup>3</sup>
Short term – Systemic effects - General population	Inhalation	260 mg/m <sup>3</sup>
Short term – Systemic effects - Workers	Inhalation	442 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	12,5 mg/kg bw/day

#### Zinc oxide

<b>Duration:</b>	<b>Route of exposure:</b>	<b>DNEL:</b>
Long term – Systemic effects - General population	Dermal	83 mg/kg bw/day
Long term – Systemic effects - Workers	Dermal	83 mg/kg bw/day
Long term – Local effects - Workers	Inhalation	0.5 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Inhalation	2.5 mg/m <sup>3</sup>
Long term – Systemic effects - Workers	Inhalation	5 mg/m <sup>3</sup>
Long term – Systemic effects - General population	Oral	0.83 mg/kg bw/day

#### PNEC

##### 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.45 mg/L
Intermittent release	Continuous	0.45 mg/L
Marine water	Single	0.045 mg/L
Soil	Single	0.063 mg/kg soil dw

#### Ethylbenzene

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	100 µg/L
Intermittent release	Continuous	100 µg/L
Marine water	Single	10-100 µg/L
Soil	Single	2.68 mg/kg soil dw

Methyl methacrylate

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.94 mg/L
Intermittent release	Continuous	0.94 mg/L
Marine water	Single	0.094 mg/L
Soil	Single	1.48 mg/kg soil dw

n-Butyl acetate

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.18 mg/L
Intermittent release	Continuous	0.36 mg/L
Marine water	Single	0.018 mg/L
Soil	Single	0.09 mg/kg soil dw

n-Butyl acrylate

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.003 mg/L
Intermittent release	Continuous	0.011 mg/L
Soil	Single	1 mg/kg soil dw

Toluene

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.68 mg/L
Intermittent release	Continuous	0.68 mg/L
Marine water	Single	0.68 mg/L
Soil	Single	2.89 mg/kg soil dw

Trizinc bis(orthophosphate)

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	20.6 µg/L
Marine water	Single	6.1 µg/L
Soil	Single	35.6 mg/kg soil dw

Xylene

<b>Route of exposure:</b>	<b>Duration of Exposure:</b>	<b>PNEC:</b>
Freshwater	Single	0.327 mg/L
Intermittent release	Continuous	0.327 mg/L
Marine water	Single	0.327 mg/L
Soil	Single	2.31 mg/kg soil dw

Zinc oxide

Route of exposure:	Duration of Exposure:	PNEC:
Freshwater	Single	20.6 µg/L
Marine water	Single	6.1 µg/L
Soil	Single	35.6 mg/kg soil dw

## 8.2. Exposure controls

Compliance with the given occupational exposure limits values should be controlled on a regular basis.

### General recommendations

Smoking, drinking and consumption of food is not allowed in the work area.

### Exposure scenarios

There are no exposure scenarios implemented for this product.

### Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

### Appropriate technical measures

The formation of vapours must be kept at a minimum and below current limit values (see above). Installation of a local exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure eyewash and emergency showers are clearly marked.

Apply standard precautions during use of the product. Avoid inhalation of vapours.

### Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Pay special attention to hands, forearms and face.

### Measures to avoid environmental exposure


Keep damming materials near the workplace. If possible, collect spillage during work.

## Individual protection measures, such as personal protective equipment


### Generally

Use only UKCA marked protective equipment.


### Respiratory Equipment

Type	Class	Colour	Standards	
Combination filter A2P2	Class 2	Brown/White	EN14387	


### Skin protection

Recommended	Type/Category	Standards	
Dedicated work clothing should be worn	-	-	

### Hand protection

Material	Glove thickness (mm)	Breakthrough time (min.)	Standards	
Butyl	0,3	> 480	EN374-2, EN16523-1, EN388	

### Eye protection

Type	Standards	
Safety glasses with side shields.	EN166	

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

#### Physical state

Liquid

#### Colour

Various colours

#### Odour / Odour threshold

Characteristic

#### pH

No data available.

#### Density (g/cm<sup>3</sup>)

1,50 - 1,60

#### Kinematic viscosity

No data available.

#### Particle characteristics

Does not apply to liquids.

### Phase changes

#### Melting point/Freezing point (°C)

No data available.

#### Softening point/range (°C)

Does not apply to liquids.

#### Boiling point (°C)

No data available.

#### Vapour pressure

No data available.

#### Relative vapour density

No data available.

#### Decomposition temperature (°C)

No data available.

### Data on fire and explosion hazards

#### Flash point (°C)

25 - 30

#### Flammability (°C)

The material is ignitable.

#### Auto-ignition temperature (°C)

No data available.

#### Lower and upper explosion limit (% v/v)

No data available.

### Solubility

#### Solubility in water

Insoluble

#### n-octanol/water coefficient (LogKow)

No data available.

#### Solubility in fat (g/L)

No data available.

### 9.2. Other information

#### VOC (g/L)

<320

#### Other physical and chemical parameters

No data available.

#### Oxidizing properties

No data available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Highly reactive and can auto-polymerize as a result of internal peroxide accumulation. The peroxides formed in these reactions are extremely shock- and heat-sensitive.

### 10.2. Chemical stability

The product is stable under the conditions, noted in section 7 "Handling and storage".

### 10.3. Possibility of hazardous reactions

None known.

### 10.4. Conditions to avoid

Avoid static electricity.

### 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

### 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 hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Product/substance	n-Butyl acetate
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	12789 mg/kg

Product/substance	n-Butyl acetate
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	14112 mg/kg

Product/substance	Xylene
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	3523 mg/kg bw

Product/substance	Ethylbenzene
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	3500 mg/kg bw

Product/substance	Ethylbenzene
Species:	Rabbit
Route of exposure:	Dermal
Test:	LD50
Result:	17,8 mL/kg bw

Product/substance	Trizinc bis(orthophosphate)
Species:	Rat
Route of exposure:	Oral
Test:	LD50
Result:	> 5000 mg/kg bw

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 8025 mg/kg bw

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50 (4 hours)  
 Result: > 5,3 mg/L

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Rabbit  
 Route of exposure: Dermal  
 Test: LD50  
 Result: 4248 mg/kg bw

Product/substance Zinc oxide  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: > 2000 mg/kg bw

Product/substance Zinc oxide  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: > 1.79 (4 h) mg/L

Product/substance Zinc oxide  
 Species: Rat  
 Route of exposure: Dermal  
 Test: LD50  
 Result: > 2000 mg/kg bw

Product/substance Methyl methacrylate  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 29,8 (4 h) mg/L

Product/substance Methyl methacrylate  
 Species: Rabbit  
 Route of exposure: Dermal  
 Test: LD50  
 Result: > 5000 mg/kg bw

Product/substance n-Butyl acrylate  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 3150 mg/kg bw

Product/substance n-Butyl acrylate  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50

Result: 10 - 11.2 (4h) mg/L

Product/substance n-Butyl acrylate  
 Species: Rabbit  
 Route of exposure: Dermal  
 Test: LD50  
 Result: 2000 mg/kg bw

Product/substance Toluene  
 Species: Rat  
 Route of exposure: Oral  
 Test: LD50  
 Result: 5580 mg/kg bw

Product/substance Toluene  
 Species: Rat  
 Route of exposure: Inhalation  
 Test: LC50  
 Result: 25.7 - 30 (4 h) mg/L

Product/substance Toluene  
 Species: Rabbit  
 Route of exposure: Dermal  
 Test: LD50  
 Result: > 5000 mg/kg bw

Based on available data for the mixture, the classification criteria are not met.

#### Skin corrosion/irritation

Based on available data for the mixture, the classification criteria are not met.

#### Serious eye damage/irritation

Causes serious eye irritation.

#### Respiratory sensitisation

Based on available data for the mixture, the classification criteria are not met.

#### Skin sensitisation

This product contains substances that may trigger an allergic reaction in already sensitized persons.

#### Germ cell mutagenicity

Based on available data for the mixture, the classification criteria are not met.

#### Carcinogenicity

Based on available data for the mixture, the classification criteria are not met.

#### Reproductive toxicity

Based on available data for the mixture, the classification criteria are not met.

#### STOT-single exposure

Based on available data for the mixture, the classification criteria are not met.

#### STOT-repeated exposure

Based on available data for the mixture, the classification criteria are not met.

#### Aspiration hazard

May be fatal if swallowed and enters airways.

#### ▼ Symptoms related to the physical, chemical and toxicological characteristics

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

#### 11.2. Information on other hazards

##### Endocrine disrupting properties

This mixture/product does not contain any substances known to have hormone-disrupting properties in relation to health.

##### Other information

Xylene has been classified by IARC as a group 3 carcinogen.

Ethylbenzene has been classified by IARC as a group 2B carcinogen.  
 Methyl methacrylate has been classified by IARC as a group 3 carcinogen.  
 n-Butyl acrylate has been classified by IARC as a group 3 carcinogen.  
 Toluene has been classified by IARC as a group 3 carcinogen.  
 Cumene has been classified by IARC as a group 2B carcinogen.

**SECTION 12: Ecological information**

**12.1. ▼ Toxicity**

Product/substance: n-Butyl acetate  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 18 mg/L

Product/substance: n-Butyl acetate  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 44 mg/L

Product/substance: Xylene  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 2.6 mg/L

Product/substance: Xylene  
 Species: Algae  
 Duration: 72 hours  
 Test: EC50  
 Result: 1.3 mg/L

Product/substance: Ethylbenzene  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 4.2 - 5.1 mg/L ·

Product/substance: Ethylbenzene  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 1.8 - 2.4 mg/L ·

Product/substance: Ethylbenzene  
 Species: Algae  
 Duration: 72 hours  
 Test: EC50  
 Result: 4.9 - 5.4 mg/L ·

Product/substance: Trizinc bis(orthophosphate)  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 0,112 mg/L

Product/substance: Trizinc bis(orthophosphate)

Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 0,155 mg/L

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 55 mg/L

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Daphnia  
 Duration: 48 hours  
 Test: LC50  
 Result: 324 mg/L

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Species: Algae  
 Duration: 96 hours  
 Test: EC50  
 Result: 250 mg/L

Product/substance Zinc oxide  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 112 - 8062 µg/L ·

Product/substance Zinc oxide  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 155 µg/L ·

Product/substance Methyl methacrylate  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 69 mg/L

Product/substance Methyl methacrylate  
 Species: Algae  
 Duration: 72 hours  
 Test: EC50  
 Result: > 110 mg/L

Product/substance n-Butyl acrylate  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 5.2 mg/L

Product/substance n-Butyl acrylate  
 Species: Daphnia  
 Duration: 48 hours  
 Test: EC50  
 Result: 8.2 mg/L

Product/substance n-Butyl acrylate  
 Species: Algae  
 Duration: 72 hours  
 Test: EC50  
 Result: 5.9 mg/L

Product/substance Toluene  
 Species: Fish  
 Duration: 96 hours  
 Test: LC50  
 Result: 5,5 mg/L

Product/substance Toluene  
 Species: Daphnia  
 Duration: 48 hours  
 Test: LC50  
 Result: 3,78 mg/L

Product/substance Toluene  
 Species: Algae  
 Duration: 7 days  
 Test: EC50  
 Result: 3.23 mg/L

Toxic to aquatic life with long lasting effects.

### 12.2. Persistence and degradability

Product/substance n-Butyl acetate  
 Result: 83 %  
 Conclusion: Readily biodegradable  
 Test: OECD 301 D

Product/substance Xylene  
 Result: >90 %  
 Conclusion: Readily biodegradable  
 Test: OECD 301 F

Product/substance Ethylbenzene  
 Result: 79 %  
 Conclusion: Readily biodegradable  
 Test: OECD 301 E

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 Result: 37 %  
 Conclusion: Not biodegradable  
 Test: OECD 301 A

Product/substance Methyl methacrylate  
 Result: 94 %  
 Conclusion: Readily biodegradable  
 Test: OECD 301 C

Product/substance n-Butyl acrylate  
 Conclusion: Readily biodegradable

Product/substance Toluene  
 Conclusion: Readily biodegradable

### 12.3. Bioaccumulative potential

Product/substance n-Butyl acetate  
 LogKow: 2,3000  
 Conclusion: No potential for bioaccumulation

Product/substance Xylene  
 LogKow: 3,6  
 Conclusion: Potential for bioaccumulation

Product/substance Ethylbenzene  
 BCF: 1  
 LogKow: 3,6000  
 Conclusion: Potential for bioaccumulation

Product/substance 3-(2,3-Epoxypropoxy)propyl]trimethoxysilane  
 LogKow: 0,5  
 Conclusion: No potential for bioaccumulation

Product/substance Methyl methacrylate  
 LogKow: 1,32  
 Conclusion: No potential for bioaccumulation

Product/substance n-Butyl acrylate  
 LogKow: 2,3800  
 Conclusion: No potential for bioaccumulation

Product/substance Toluene  
 LogKow: 2,7300  
 Conclusion: No potential for bioaccumulation

#### 12.4. Mobility in soil

No data available.

#### 12.5. Results of PBT and vPvB assessment

This mixture/product does not contain any substances known to fulfil the criteria for PBT and vPvB classification.

#### 12.6. Endocrine disrupting properties

This mixture/product does not contain any substances considered to have endocrine-disrupting properties in relation to the environment.

#### 12.7. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms.

This product contains substances, which may cause adverse long-term effects to the aquatic environment.

### SECTION 13: Disposal considerations

#### 13.1. ▼ Waste treatment methods

Product is covered by the regulations on hazardous waste. (\*)

To the extent the material has not been subject to regular tests of peroxide formation the waste shall be treated as explosive waste.

HP 3 - Flammable

HP 14 - Ecotoxic

Dispose of contents/container to an approved waste disposal plant.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.






##### EWC code

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

#### Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

**SECTION 14: Transport information**

	<b>14.1 UN / ID</b>	<b>14.2 UN proper shipping name</b>	<b>14.3 Hazard class(es)</b>	<b>14.4 PG*</b>	<b>14.5 Env**</b>	<b>Other information:</b>
ADR	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1  	III	Yes	Limited quantities: 5 L Tunnel restriction code: (E) See below for additional information.
IMDG	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1  	III	Yes	Limited quantities: 5 L EmS: F-E S-E See below for additional information.
IATA	UN1263	PAINT	Transport hazard class: 3 Label: 3 Classification code: F1  	III	Yes	See below for additional information.

\* Packing group

\*\* Environmental hazards

**Additional information**

This product is within scope of the regulations of transport of dangerous goods.

ADR / See Table A, section 3.2.1 for any information on special provisions, requirements, or warnings in connection with transport. See section 5.4.3, for instructions in writing regarding mitigation of damages in relation to incidents or accidents during transport.

IMDG / See section 3.2.1, for any information on special provisions, requirements, or warnings in connection with transport.

IATA / See Table 4.2 for any information on special provisions, requirements, or warnings in connection with transport.

**14.6. Special precautions for user**

Not applicable.

**14.7. Maritime transport in bulk according to IMO instruments**

No data available.

**SECTION 15: Regulatory information**

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

▼ **Restrictions for application**

Restricted to professional and industrial use.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Must not be used by persons suffering from acrylic dermatitis.

#### Demands for specific education

No specific requirements.

#### ▼ SEVESO - Categories / dangerous substances

P5c - FLAMMABLE LIQUIDS, Qualifying quantity (lower-tier): 5.000 tonnes / (upper-tier): 50.000 tonnes

E2 - ENVIRONMENTAL HAZARDS, Qualifying quantity (lower-tier): 200 tonnes / (upper-tier): 500 tonnes

#### Regulation on drug precursors

Toluene is included (Category 3)

#### REACH, Annex XVII

Toluene is subject to restrictions, UK-REACH annex XVII (entry 48).

n-Butyl acetate is subject to UK-REACH restrictions (entry 40).

Xylene is subject to UK-REACH restrictions (entry 40).

Ethylbenzene is subject to UK-REACH restrictions (entry 40).

Methyl methacrylate is subject to UK-REACH restrictions (entry 40).

n-Butyl acrylate is subject to UK-REACH restrictions (entry 40).

Toluene is subject to UK-REACH restrictions (entry 40).

Cumene is subject to UK-REACH restrictions (entry 40).

#### Additional information

Not applicable.

#### Sources

The Health and Safety at Work etc. Act 1974 Regulations 2013.

Control of Major Accident Hazards (COMAH) Regulations 2015.

2012 No. 1715 ENVIRONMENTAL PROTECTION: The Volatile Organic Compounds in Paints, Varnishes and Vehicle Refinishing Products Regulations 2012.

Regulation (EU) No 1357/2014 of 18 December 2014 on waste as retained and amended in UK law.

The Controlled Drugs (Drug Precursors) Regulations 2008.

Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures (CLP) as retained and amended in UK law.

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) as retained and amended in UK law.

#### 15.2. Chemical safety assessment

No

### SECTION 16: Other information

#### Full text of H-phrases as mentioned in section 3

EUH066, Repeated exposure may cause skin dryness or cracking.

H225, Highly flammable liquid and vapour.

H226, Flammable liquid and vapour.

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.

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.

H350, May cause cancer.

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.

#### Abbreviations and acronyms

ADN = European Provisions concerning the International Carriage of Dangerous Goods by Inland Waterway

ADR = The European Agreement concerning the International Carriage of Dangerous Goods by Road

ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

CAS = Chemical Abstracts Service

CE = Conformité Européenne (European conformity)

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]

CSA = Chemical Safety Assessment

CSR = Chemical Safety Report

DMEL = Derived Minimal Effect Level

DNEL = Derived No Effect Level

EINECS = European Inventory of Existing Commercial chemical Substances

ES = Exposure Scenario

EUH statement = CLP-specific Hazard statement

EuPCS = European Product Categorisation System

EWC = European Waste Catalogue

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

GWP = Global warming potential

IARC = International Agency for Research on Cancer (IARC)

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

OECD = Organisation for Economic Co-operation and Development

PBT = Persistent, Bioaccumulative and Toxic

PNEC = Predicted No Effect Concentration

RID = The Regulations concerning the International Carriage of Dangerous Goods by Rail

RRN = REACH Registration Number

SCL = A specific concentration limit

SVHC = Substances of Very High Concern

STOT-RE = Specific Target Organ Toxicity - Repeated Exposure

STOT-SE = Specific Target Organ Toxicity - Single Exposure

TWA = Time weighted average

UN = United Nations

UVBC = Unknown or variable composition, complex reaction products or of biological materials

VOC = Volatile Organic Compound

vPvB = Very Persistent and Very Bioaccumulative

#### Additional information

The classification of the substance/mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the substance/mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) as retained and amended in UK law.

The classification of the mixture in regard to physical hazards has been based on experimental data.

#### The safety data sheet is validated by

DH

#### Other

A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a triangle.

The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.

It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.

Country-language: GB-en