

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

### 1.1. Product identifier

Trade name or designation of the mixture	Hylobond 5101 Adhesive
Registration number	-
Synonyms	None.
SDS number	32
Issue date	23-September-2015
Version number	03
Revision date	18-February-2019
Supersedes date	23-August-2018

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

Identified uses	Structural adhesive.
Uses advised against	Use in accordance with supplier's recommendations.

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

Manufacturer:	Hylomar Ltd.
Address:	Hylo House, Cale Lane, New Springs, Wigan, Greater Manchester, UK, WN2 1JT
Telephone number:	+44(0)1942 617000
E-mail address:	info@hylomar.co.uk
Contact person:	Technical Department
1.4. Emergency telephone number	+1-760-476-3961 (US)
	Access code: 333544

## SECTION 2: Hazards identification

### 2.1. Classification of the substance or mixture

The mixture has been assessed and/or tested for its physical, health and environmental hazards and the following classification applies.

#### Classification according to Regulation (EC) No 1272/2008 as amended

##### Physical hazards

Flammable liquids	Category 2	H225 - Highly flammable liquid and vapour.
-------------------	------------	--

##### Health hazards

Skin corrosion/irritation	Category 1A	H314 - Causes severe skin burns and eye damage.
Serious eye damage/eye irritation	Category 1	H318 - Causes serious eye damage.
Skin sensitisation	Category 1	H317 - May cause an allergic skin reaction.
Specific target organ toxicity - single exposure	Category 3 respiratory tract irritation	H335 - May cause respiratory irritation.

##### Environmental hazards

Hazardous to the aquatic environment, long-term aquatic hazard	Category 2	H411 - Toxic to aquatic life with long lasting effects.
--	------------	---

**Hazard summary** May be ignited by heat, sparks or flames. Causes severe skin burns and eye damage. May cause an allergic skin reaction. May cause irritation to the respiratory system. Dangerous for the environment if discharged into watercourses.

### 2.2. Label elements

#### Label according to Regulation (EC) No. 1272/2008 as amended

Contains:	Dibenzoyl peroxide, Dibutyl maleate, Methacrylic acid, Methyl methacrylate, Propylidynetrimethanol, ethoxylated, esters with acrylic acid, Rosin
-----------	--

## Hazard pictograms



## Signal word

Danger

## Hazard statements

H411	Toxic to aquatic life with long lasting effects.
H225	Highly flammable liquid and vapour.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H335	May cause respiratory irritation.
H318	Causes serious eye damage.

## Precautionary statements

### Prevention

P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P260	Do not breathe vapour.
P273	Avoid release to the environment.

### Response

P303 + P361 + P353	IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
--------------------	--

### Storage

None.

### Disposal

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
------	---

## Supplemental label information

None.

## 2.3. Other hazards

This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### General information

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
Methyl methacrylate	25 - 50	80-62-6 201-297-1	01-2119452498-28-XXXX	607-035-00-6	#
<b>Classification:</b>	Flam. Liq. 2;H225, Skin Irrit. 2;H315, Skin Sens. 1;H317, STOT SE 3;H335				D
Methacrylic acid	<= 10	79-41-4 201-204-4	01-2119463884-26-XXXX	607-088-00-5	
<b>Classification:</b>	Acute Tox. 4;H302, Acute Tox. 3;H311, Skin Corr. 1A;H314, Eye Dam. 1;H318, Acute Tox. 4;H332, STOT SE 3;H335				D
Dipropylene glycol dibenzoate	<= 10	27138-31-4 248-258-5	01-2119529241-49-XXXX	-	
<b>Classification:</b>	Aquatic Chronic 3;H412				
Hexan-6-olide	<= 3	502-44-3 207-938-1	-	-	
<b>Classification:</b>	Eye Irrit. 2;H319				
Dibenzoyl peroxide	<= 2.4	94-36-0 202-327-6	01-2119511472-50-XXXX	617-008-00-0	
<b>Classification:</b>	Org. Perox. B;H241, Skin Sens. 1;H317, Eye Irrit. 2;H319, Aquatic Acute 1;H400(M=10), Aquatic Chronic 1;H410(M=10)				
Dibutyl maleate	< 1	105-76-0 203-328-4	-	-	
<b>Classification:</b>	Skin Sens. 1;H317, STOT RE 2;H373, Aquatic Acute 1;H400				
Propylidynetrimethanol, ethoxylated, esters with acrylic acid	< 1	28961-43-5 500-066-5	-	-	
<b>Classification:</b>	Skin Sens. 1;H317, Eye Irrit. 2;H319				
Rosin	< 1	8050-09-7 232-475-7	-	650-015-00-7	
<b>Classification:</b>	Skin Sens. 1;H317				

Chemical name	%	CAS-No. / EC No.	REACH Registration No.	Index No.	Notes
trizinc bis(orthophosphate)	<= 0.3	7779-90-0 231-944-3	01-2119485044-40-XXXX	030-011-00-6	
<b>Classification:</b>	Aquatic Acute 1;H400, Aquatic Chronic 1;H410				

#### List of abbreviations and symbols that may be used above

#: This substance has been assigned Union workplace exposure limit(s).

Note D: Certain substances which are susceptible to spontaneous polymerisation or decomposition are generally placed on the market in a stabilised form. It is in this form that they are listed in Part 3. However, such substances are sometimes placed on the market in a non-stabilised form. In this case, the supplier must state on the label the name of the substance followed by the words "non-stabilised".

**Composition comments** All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. Components not listed are either non-hazardous or are below reportable limits. The full text for all H-statements is displayed in section 16.

## SECTION 4: First aid measures

**General information** Take off all contaminated clothing immediately. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

### 4.1. Description of first aid measures

**Inhalation** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison centre or doctor/physician if you feel unwell.

**Skin contact** Remove contaminated clothing immediately and wash skin with soap and water. If skin irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician or poison control centre immediately.

**Ingestion** Rinse mouth thoroughly. Get medical attention if any discomfort occurs.

**4.2. Most important symptoms and effects, both acute and delayed** Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Permanent eye damage including blindness could result. May cause respiratory irritation. Sensitisation.

**4.3. Indication of any immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.

## SECTION 5: Firefighting measures

**General fire hazards** Highly flammable liquid and vapour.

### 5.1. Extinguishing media

**Suitable extinguishing media** Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>).

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**5.2. Special hazards arising from the substance or mixture** Vapours may form explosive mixtures with air. Vapours may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.

### 5.3. Advice for firefighters

**Special protective equipment for firefighters** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Special fire fighting procedures** In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.

**Specific methods** Use standard firefighting procedures and consider the hazards of other involved materials.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel** Ventilate closed spaces before entering them. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Do not breathe vapour. Avoid contact with eyes, skin, and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Wear appropriate protective equipment and clothing during clean-up. Local authorities should be advised if significant spillages cannot be contained.

**For emergency responders** Wear appropriate protective equipment and clothing during clean-up. Use personal protection recommended in Section 8 of the SDS.

**6.2. Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

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

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil etc) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools. Prevent product from entering drains.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use.

### 6.4. Reference to other sections

For personal protection, see section 8 of the SDS. For waste disposal, see section 13 of the SDS.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Do not breathe mist/vapours. Do not get in eyes, on skin, or on clothing. Avoid prolonged exposure. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. Persons susceptible to allergic reactions should not handle this product.

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

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store in tightly closed container. Store away from incompatible materials (see section 10 of the SDS).

### 7.3. Specific end use(s)

Structural adhesive.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Occupational exposure limits

#### UK. EH40 Workplace Exposure Limits (WELs)

Components	Type	Value	Form
Dibenzoyl peroxide (CAS 94-36-0)	TWA	5 mg/m <sup>3</sup>	
Methacrylic acid (CAS 79-41-4)	STEL	143 mg/m <sup>3</sup>	
		40 ppm	
	TWA	72 mg/m <sup>3</sup>	
Methyl methacrylate (CAS 80-62-6)		20 ppm	
	STEL	416 mg/m <sup>3</sup>	
		100 ppm	
Rosin (CAS 8050-09-7)	TWA	208 mg/m <sup>3</sup>	
		50 ppm	
	STEL	0.15 mg/m <sup>3</sup>	Fume.
	TWA	0.05 mg/m <sup>3</sup>	Fume.

#### EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU

Components	Type	Value
Methyl methacrylate (CAS 80-62-6)	STEL	100 ppm
	TWA	50 ppm

### Biological limit values

No biological exposure limits noted for the ingredient(s).

### Recommended monitoring procedures

Follow standard monitoring procedures.

### Derived no effect levels (DNELs)

#### General Population

Components	Value	Assessment factor	Notes
Dibenzoyl peroxide (CAS 94-36-0)			
Long-term, Systemic, Oral	2 mg/kg bw/day	100	Repeated dose toxicity

Dipropylene glycol dibenzoate (CAS 27138-31-4)			
Long-term, Systemic, Dermal	0.22 mg/kg bw/day	460	Repeated dose toxicity
Long-term, Systemic, Inhalation	8.69 mg/m3	115	Repeated dose toxicity
Long-term, Systemic, Oral	5 mg/kg bw/day	200	Repeated dose toxicity
Methacrylic acid (CAS 79-41-4)			
Long-term, Local, Inhalation	6.55 mg/m3	53.7	
Long-term, Systemic, Dermal	2.55 mg/kg bw/day	138	respiratory tract irritation
Long-term, Systemic, Inhalation	6.3 mg/m3	56	respiratory tract irritation
Short-term, Local, Dermal	1 %	1	Skin irritation/corrosion
Methyl methacrylate (CAS 80-62-6)			
Long-term, Systemic, Dermal	8.2 mg/kg bw/day	20	Repeated dose toxicity
Long-term, Systemic, Inhalation	74.3 mg/m3	28	Repeated dose toxicity
Short-term, Local, Dermal	1.5 mg/cm2	10	Skin Sensitisation
Short-term, Local, Inhalation	104 mg/m3	2	Repeated dose toxicity
trizinc bis(orthophosphate) (CAS 7779-90-0)			
Long-term, Systemic, Dermal	83 mg/kg bw/day	1	Repeated dose toxicity
Long-term, Systemic, Inhalation	2.5 mg/m3	1	Repeated dose toxicity
Long-term, Systemic, Oral	0.83 mg/kg bw/day	1	Repeated dose toxicity

### **Workers**

<b>Components</b>	<b>Value</b>	<b>Assessment factor</b>	<b>Notes</b>
Dibenzoyl peroxide (CAS 94-36-0)			
Long-term, Local, Dermal	34 µg/cm2	5	Skin irritation/corrosion
Long-term, Systemic, Dermal	13.3 mg/kg bw/day	87.5	Repeated dose toxicity
Long-term, Systemic, Inhalation	39 mg/m3	12.5	Repeated dose toxicity
Dipropylene glycol dibenzoate (CAS 27138-31-4)			
Long-term, Systemic, Dermal	10 mg/kg bw/day	100	Repeated dose toxicity
Long-term, Systemic, Inhalation	8.8 mg/m3	114	Repeated dose toxicity
Methacrylic acid (CAS 79-41-4)			
Long-term, Local, Inhalation	88 mg/m3	4	
Long-term, Systemic, Dermal	4.25 mg/kg bw/day	82.8	respiratory tract irritation
Long-term, Systemic, Inhalation	29.6 mg/m3	11.9	respiratory tract irritation
Methyl methacrylate (CAS 80-62-6)			
Long-term, Systemic, Dermal	13.67 mg/kg bw/day	12	Repeated dose toxicity
Long-term, Systemic, Inhalation	208 mg/m3	1	Repeated dose toxicity
Short-term, Local, Dermal	1.5 mg/cm2	10	Skin sensitisation
Short-term, Local, Inhalation	208 mg/m3	1	Repeated dose toxicity
trizinc bis(orthophosphate) (CAS 7779-90-0)			
Long-term, Systemic, Dermal	83 mg/kg bw/day	1	Repeated dose toxicity
Long-term, Systemic, Inhalation	5 mg/m3	1	Repeated dose toxicity

### **Predicted no effect concentrations (PNECs)**

<b>Components</b>	<b>Value</b>	<b>Assessment factor</b>	<b>Notes</b>
Dibenzoyl peroxide (CAS 94-36-0)			
Freshwater	0.02 µg/l	50	
Marine water	0.002 µg/l	500	
Sediment (freshwater)	0.013 mg/kg		
Sediment (marine water)	0.001 mg/kg		
Soil	0.003 mg/kg		
STP	0.35 mg/l	100	
Dipropylene glycol dibenzoate (CAS 27138-31-4)			
Freshwater	3.7 µg/l	1000	
Marine water	0.37 µg/l	10000	
Secondary poisoning	333 mg/kg	30	Oral
Sediment (freshwater)	1.49 mg/kg		
Sediment (marine water)	0.149 mg/kg		
Soil	1 mg/kg	1000	
STP	10 mg/l	10	
Methacrylic acid (CAS 79-41-4)			
Freshwater	0.82 mg/l	10	
Intermittent releases	0.82 mg/l		
Marine water	0.82 mg/l	10	
Soil	1.2 mg/kg		
STP	10 mg/l	10	

Methyl methacrylate (CAS 80-62-6)		
Freshwater	0.94 mg/l	10
Intermittent releases	0.94 mg/l	
Marine water	0.94 mg/l	10
Sediment (freshwater)	5.74 mg/kg	
Soil	1.47 mg/kg	
STP	10 mg/l	10
trizinc bis(orthophosphate) (CAS 7779-90-0)		
Freshwater	20.6 µg/l	1
Marine water	6.1 µg/l	1
Sediment (freshwater)	117.8 mg/kg	1
Sediment (marine water)	56.5 mg/kg	1
Soil	35.6 mg/kg	1
STP	100 µg/l	1

## 8.2. Exposure controls

### Appropriate engineering controls

Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.

### Individual protection measures, such as personal protective equipment

#### General information

Use personal protective equipment as required. Personal protection equipment should be chosen according to the CEN standards and in discussion with the supplier of the personal protective equipment.

#### Eye/face protection

Wear safety glasses with side shields (or goggles) and a face shield. Eye protection should meet standard EN 166.

#### Skin protection

##### - Hand protection

Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier. Be aware that the liquid may penetrate the gloves. Frequent change is advisable. Wear suitable gloves tested to EN374.

##### - Other

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

#### Respiratory protection

Chemical respirator with organic vapour cartridge and full facepiece.

#### Thermal hazards

Wear appropriate thermal protective clothing, when necessary.

### Hygiene measures

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants. Contaminated work clothing should not be allowed out of the workplace.

### Environmental exposure controls

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. Fume scrubbers, filters or engineering modifications to the process equipment may be necessary to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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

#### Appearance

**Physical state** Liquid.

**Form** Liquid.

**Colour** White.

**Odour** Strong. Acrylic.

**Odour threshold** Not available.

**pH** Not applicable.

**Melting point/freezing point** Not available.

**Initial boiling point and boiling range** Not available.

**Flash point** 12.0 °C (53.6 °F) Closed cup

**Evaporation rate** Not available.

**Flammability (solid, gas)** Not applicable.

#### Upper/lower flammability or explosive limits

**Flammability limit - lower (%)** Not available.

<b>Flammability limit - upper (%)</b>	Not available.
<b>Vapour pressure</b>	Not available.
<b>Vapour density</b>	Not available.
<b>Relative density</b>	0.96 - 1.02
<b>Solubility(ies)</b>	Insoluble in water.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	> 0.4 cm <sup>2</sup> /s Kinematic.
<b>Viscosity temperature</b>	20 °C (68 °F)
<b>Explosive properties</b>	Not explosive.
<b>Oxidising properties</b>	Not oxidising.
<b>9.2. Other information</b>	No relevant additional information available.

## SECTION 10: Stability and reactivity

<b>10.1. Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>10.2. Chemical stability</b>	Material is stable under normal conditions.
<b>10.3. Possibility of hazardous reactions</b>	Hazardous polymerization may occur.
<b>10.4. Conditions to avoid</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Avoid temperatures exceeding the flash point. Contact with incompatible materials. Protect against direct sunlight.
<b>10.5. Incompatible materials</b>	Strong oxidising agents. Alkali metals. Peroxides. Strong oxidizers, strong acids, and strong bases.
<b>10.6. Hazardous decomposition products</b>	Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

## SECTION 11: Toxicological information

<b>General information</b>	Occupational exposure to the substance or mixture may cause adverse effects.
<b>Information on likely routes of exposure</b>	
<b>Inhalation</b>	May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes severe skin burns. May cause an allergic skin reaction.
<b>Eye contact</b>	Causes serious eye damage.
<b>Ingestion</b>	May cause discomfort if swallowed.
<b>Symptoms</b>	Burning pain and severe corrosive skin damage. Causes serious eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Sensitisation. Permanent eye damage including blindness could result. May cause respiratory irritation.

### 11.1. Information on toxicological effects

<b>Acute toxicity</b>	Not expected to be acutely toxic.	
<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Methacrylic acid (CAS 79-41-4)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	500 - 1000 mg/kg
<b>Inhalation</b>		
LC50	Rat	7.1 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	1320 mg/kg
Methyl methacrylate (CAS 80-62-6)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
<b>Inhalation</b>		
<i>Vapour</i>		
LC50	Rat	29.8 mg/l, 4 Hours

Components	Species	Test Results
Propylidynetrimethanol, ethoxylated, esters with acrylic acid (CAS 28961-43-5)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 13200 mg/kg
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
Rosin (CAS 8050-09-7)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rat	> 2000 mg/kg, 24 Hours
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
<b>Skin corrosion/irritation</b>	Causes severe skin burns.	
<b>Serious eye damage/eye irritation</b>	Causes serious eye damage.	
<b>Respiratory sensitisation</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Skin sensitisation</b>	May cause an allergic skin reaction.	
<b>Germ cell mutagenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Carcinogenicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>		
Dibenzoyl peroxide (CAS 94-36-0)	3 Not classifiable as to carcinogenicity to humans.	
Methyl methacrylate (CAS 80-62-6)	3 Not classifiable as to carcinogenicity to humans.	
<b>Reproductive toxicity</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Specific target organ toxicity - single exposure</b>	May cause respiratory irritation.	
<b>Specific target organ toxicity - repeated exposure</b>	Due to partial or complete lack of data the classification is not possible.	
<b>Aspiration hazard</b>	Due to the physical form of the product it is not an aspiration hazard.	
<b>Mixture versus substance information</b>	The product is a mixture.	
<b>Other information</b>	No other specific acute or chronic health impact noted.	

## SECTION 12: Ecological information

**12.1. Toxicity** Toxic to aquatic life with long lasting effects.

Components	Species	Test Results
Dibenzoyl peroxide (CAS 94-36-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	LC50	Pseudokirchnerella subcapitata 0.0711 mg/l, 72 hours
Fish	EC50	Oncorhynchus mykiss 0.0602 mg/l, 96 hours
Methacrylic acid (CAS 79-41-4)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EbC50	Pseudokirchnerella subcapitata 20 mg/l, 72 hours
<i>Chronic</i>		
Algae	NOEC	Pseudokirchnerella subcapitata 8.2 mg/l, 72 hours
Methyl methacrylate (CAS 80-62-6)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Daphnia magna 69 mg/l, 48 hours
<i>Chronic</i>		
Fish	NOEC	Zebrafish 9.4 mg/l, 35 days



Components	Species		Test Results
Propylidynetrimethanol, ethoxylated, esters with acrylic acid (CAS 28961-43-5)			
<b>Aquatic</b>			
<i>Acute</i>			
Fish	LC50	Fish	1.95 mg/l, 96 hours
<i>Chronic</i>			
Algae	EC50	Desmodesmus subspicatus	2.2 mg/l, 72 hours
Rosin (CAS 8050-09-7)			
<b>Aquatic</b>			
<i>Acute</i>			
Crustacea	EC50	Daphnia magna	1.6 mg/l

**12.2. Persistence and degradability** No data is available on the degradability of this product.

### 12.3. Bioaccumulative potential

#### Partition coefficient

##### n-octanol/water (log Kow)

Dibenzoyl peroxide (CAS 94-36-0)	3.46
Hexan-6-olide (CAS 502-44-3)	1.215
Methacrylic acid (CAS 79-41-4)	0.93
Methyl methacrylate (CAS 80-62-6)	1.38

**Bioconcentration factor (BCF)** Not available.

**12.4. Mobility in soil** The product is insoluble in water.

**12.5. Results of PBT and vPvB assessment** This mixture does not contain substances assessed to be vPvB / PBT according to Regulation (EC) No 1907/2006, Annex XIII. Not a PBT or vPvB substance or mixture.

**12.6. Other adverse effects** None known.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

<b>Residual waste</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.
<b>EU waste code</b>	08 04 09* The Waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Disposal methods/information</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Special precautions</b>	Dispose in accordance with all applicable regulations.

## SECTION 14: Transport information

### ADR

<b>14.1. UN number</b>	UN1133
<b>14.2. UN proper shipping name</b>	ADHESIVES containing flammable liquid
<b>14.3. Transport hazard class(es)</b>	
Class	3
Subsidiary risk	-
Label(s)	3
Hazard No. (ADR)	30
Tunnel restriction code	D/E
<b>14.4. Packing group</b>	III
<b>14.5. Environmental hazards</b>	Yes
<b>14.6. Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

### RID

<b>14.1. UN number</b>	UN1133
<b>14.2. UN proper shipping name</b>	ADHESIVES containing flammable liquid

**14.3. Transport hazard class(es)**

Class 3  
Subsidiary risk -  
Label(s) 3

**14.4. Packing group** III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**ADN****14.1. UN number** UN1133**14.2. UN proper shipping name** ADHESIVES containing flammable liquid**14.3. Transport hazard class(es)**

Class 3  
Subsidiary risk -  
Label(s) 3

**14.4. Packing group** III**14.5. Environmental hazards** Yes**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IATA****14.1. UN number** UN1133**14.2. UN proper shipping name** Adhesives containing flammable liquid**14.3. Transport hazard class(es)**

Class 3  
Subsidiary risk -

**14.4. Packing group** III**14.5. Environmental hazards** Yes**ERG Code** 3L**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IMDG****14.1. UN number** UN1133**14.2. UN proper shipping name** ADHESIVES containing flammable liquid**14.3. Transport hazard class(es)**

Class 3  
Subsidiary risk -

**14.4. Packing group** III**14.5. Environmental hazards****Marine pollutant** Yes**EmS** F-E, S-D**14.6. Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.**SECTION 15: Regulatory information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****EU regulations****Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer, Annex I and II, as amended**  
Not listed.**Regulation (EC) No. 850/2004 On persistent organic pollutants, Annex I as amended**  
Not listed.**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 1 as amended**  
Not listed.**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 2 as amended**  
Not listed.**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex I, Part 3 as amended**  
Not listed.

**Regulation (EU) No. 649/2012 concerning the export and import of dangerous chemicals, Annex V as amended**

Not listed.

**Regulation (EC) No. 166/2006 Annex II Pollutant Release and Transfer Registry, as amended**

trizinc bis(orthophosphate) (CAS 7779-90-0)

**Regulation (EC) No. 1907/2006, REACH Article 59(10) Candidate List as currently published by ECHA**

Not listed.

#### **Authorisations**

**Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorization, as amended**

Not listed.

#### **Restrictions on use**

**Regulation (EC) No. 1907/2006, REACH Annex XVII Substances subject to restriction on marketing and use as amended**

Methyl methacrylate (CAS 80-62-6)

**Directive 2004/37/EC: on the protection of workers from the risks related to exposure to carcinogens and mutagens at work, as amended.**

Not listed.

#### **Other EU regulations**

**Directive 2012/18/EU on major accident hazards involving dangerous substances, as amended**

Not listed.

#### **Other regulations**

The product is classified and labelled in accordance with Regulation (EC) 1272/2008 (CLP Regulation) as amended. This Safety Data Sheet complies with the requirements of Regulation (EC) No 1907/2006, as amended.

Directive 2012/18/EU on major accident hazards involving dangerous substances: P5

#### **National regulations**

Follow national regulation for work with chemical agents in accordance with Directive 98/24/EC, as amended.

Young people under 18 years old are not allowed to work with this product according to EU Directive 94/33/EC on the protection of young people at work, as amended.

#### **15.2. Chemical safety assessment**

No Chemical Safety Assessment has been carried out.

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

#### **List of abbreviations**

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.

ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.

EC50: Effective Concentration, 50%.

IATA: International Air Transport Association.

IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.

IMDG Code: International Maritime Dangerous Goods Code.

LC50: Lethal Concentration, 50%.

LD50: Lethal Dose, 50%.

MARPOL: International Convention for the Prevention of Pollution from Ships.

NOEC: No observed effect concentration.

PBT: Persistent, bioaccumulative and toxic.

RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.

STEL: Short-Term Exposure Limit.

STP: Sewage treatment plant.

TWA: Time Weighted Average Value.

vPvB: Very Persistent and very Bioaccumulative.

#### **References**

HSDB® - Hazardous Substances Data Bank

IARC Monographs. Overall Evaluation of Carcinogenicity

#### **Information on evaluation method leading to the classification of mixture**

The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. The mixture is classified based on test data for physical hazards. The classification for health and environmental hazards is derived by a combination of calculation methods and test data, if available. For details, refer to Sections 9, 11 and 12.

#### **Full text of any H-statements not written out in full under Sections 2 to 15**

H225 Highly flammable liquid and vapour.

H241 Heating may cause a fire or explosion.

H302 Harmful if swallowed.

H311 Toxic in contact with skin.

H314 Causes severe skin burns and eye damage.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H318 Causes serious eye damage.  
H319 Causes serious eye irritation.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H373 May cause damage to organs through prolonged or repeated exposure by ingestion.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.  
H412 Harmful to aquatic life with long lasting effects.  
1, 2, 3, 8, 9, 11, 16.

**This SDS contains revisions in the following section(s):**

**Training information**

Follow training instructions when handling this material.

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available.