

SAFETY DATA SHEET

Crestabond M1-05 400ml

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

1.1 Product identifier

Product name : Crestabond M1-05 400ml
Product code : OL210500
Product description : Not available.
Product type : Liquid.
Other means of identification : Not available.

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

Identified uses

Adhesive.

Uses advised against

Not applicable.

1.3 Details of the supplier of the safety data sheet

Scott Bader ME
Jebel Ali
Dubai
United Arab Emirates.
Tel: +971 481 50222

e-mail address of person responsible for this SDS : SDS@scottbader.com

1.4 Emergency telephone number

National advisory body/Poison Centre

Supplier

Telephone number : +44 1865 407333 (NCEC) 24h

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Flam. Liq. 2, H225
Skin Corr. 1A, H314
Eye Dam. 1, H318
Skin Sens. 1, H317
STOT SE 3, H335
Aquatic Chronic 2, H411

The product is classified as hazardous according to Regulation (EC) 1272/2008 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.

2.2 Label elements

SECTION 2: Hazards identification

Hazard pictograms



Signal word

: Danger

Hazard statements

: 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.
H411 - Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention

: Wear protective gloves, protective clothing and 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.

Response

: Collect spillage. IF INHALED: Immediately call a POISON CENTER or doctor. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. Immediately call a POISON CENTER or doctor. Wash contaminated clothing 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. Immediately call a POISON CENTER or doctor.

Storage

: Store in a well-ventilated place. Keep container tightly closed.

Disposal

: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients

: methyl methacrylate
methacrylic acid
dibenzoyl peroxide
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide
dibutyl maleate
rosin

Supplemental label elements

: Not applicable.

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

: Not applicable.

Special packaging requirements

Containers to be fitted with child-resistant fastenings

: 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.

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SECTION 3: Composition/information on ingredients

3.2 Mixtures : Mixture

Product/ingredient name	Identifiers	%	Classification	Specific Conc. Limits, M-factors and ATEs	Type
methyl methacrylate	REACH #: 01-2119452498-28 EC: 201-297-1 CAS: 80-62-6 Index: 607-035-00-6	≥40 - ≤50	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Skin Sens. 1, H317 STOT SE 3, H335	-	[1] [2]
methacrylic acid	REACH #: 01-2119463884-26 EC: 201-204-4 CAS: 79-41-4 Index: 607-088-00-5	≤10	Acute Tox. 4, H302 Acute Tox. 4, H312 Skin Corr. 1A, H314 Eye Dam. 1, H318 STOT SE 3, H335	ATE [Oral] = 1060 mg/kg ATE [Dermal] = 1100 mg/kg STOT SE 3, H335: C ≥ 1%	[1]
oxydipropyl dibenzoate	REACH #: 01-2119529241-49 EC: 248-258-5 CAS: 27138-31-4	≤10	Aquatic Chronic 3, H412	-	[1]
dibenzoyl peroxide	REACH #: 01-2119511472-50 EC: 202-327-6 CAS: 94-36-0 Index: 617-008-00-0	≤2.1	Org. Perox. B, H241 Eye Irrit. 2, H319 Skin Sens. 1, H317 Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 10 M [Chronic] = 10	[1]
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	REACH #: 01-2120140608-57 CAS: 1187441-10-6	<1	Met. Corr. 1, H290 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1B, H317	-	[1]
dibutyl maleate	REACH #: 01-2119523581-45 EC: 203-328-4 CAS: 105-76-0	<1	Skin Sens. 1, H317 STOT RE 2, H373	-	[1]
rosin	REACH #: 01-2119480418-32 EC: 232-475-7 CAS: 8050-09-7 Index: 650-015-00-7	<1	Skin Sens. 1, H317	-	[1]
trizinc bis(orthophosphate)	REACH #: 01-2119485044-40 EC: 231-944-3 CAS: 7779-90-0 Index: 030-011-00-6	≤0.3	Aquatic Acute 1, H400 Aquatic Chronic 1, H410	M [Acute] = 1 M [Chronic] = 1	[1]
ethylenebis(oxyethylene) bis [3-(5-tert-butyl-4-hydroxy-m-tolyl)propionate]	EC: 253-039-2 CAS: 36443-68-2	≤0.3	Aquatic Chronic 1, H410	M [Chronic] = 10	[1]
orthophosphoric acid	REACH #: 01-2119485924-24 EC: 231-633-2 CAS: 7664-38-2	≤0.1	Skin Corr. 1B, H314 Eye Dam. 1, H318	-	[1] [2]
1-methoxy-2-propanol	REACH #: 01-2119457435-35 EC: 203-539-1	≤0.1	Flam. Liq. 3, H226 STOT SE 3, H336	-	[1] [2]

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SECTION 3: Composition/information on ingredients

	CAS: 107-98-2 Index: 603-064-00-3		See Section 16 for the full text of the H statements declared above.		
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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.

Type

[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.

SECTION 4: First aid measures

4.1 Description of first aid measures

- Eye contact** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician.
- Inhalation** : Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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. 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** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. In the event of any complaints or symptoms, avoid further exposure. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. 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. Chemical burns must be treated promptly by a physician. 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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain
watering
redness

SECTION 4: First aid measures

- Inhalation** : Adverse symptoms may include the following:
respiratory tract irritation
coughing
- Skin contact** : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur
- Ingestion** : Adverse symptoms may include the following:
stomach pains

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media** : Use dry chemical, CO₂, water spray (fog) or foam.
- Unsuitable extinguishing media** : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

- Hazards from the substance or mixture** : Highly flammable liquid and vapour. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. This material is 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
halogenated compounds

5.3 Advice for firefighters

- Special protective actions for fire-fighters** : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
- Special protective equipment for fire-fighters** : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Do not breathe 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".

SECTION 6: Accidental release measures

6.2 Environmental precautions : Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities. 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 non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations. Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4 Reference to other sections : See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

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 breathe vapour or mist. Do not ingest. 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. Store locked up. 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

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SECTION 7: Handling and storage

Category	Notification and MAPP threshold	Safety report threshold
P5c E2	5000 tonne 200 tonne	50000 tonne 500 tonne

7.3 Specific end use(s)

Recommendations : Not available.

Industrial sector specific solutions : Not available.

SECTION 8: Exposure controls/personal protection

The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

8.1 Control parameters

Occupational exposure limits

Product/ingredient name	Exposure limit values
methyl methacrylate	EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values TWA: 50 ppm 8 hours. STEL: 100 ppm 15 minutes.
orthophosphoric acid	EU OEL (Europe, 1/2022). Notes: list of indicative occupational exposure limit values TWA: 1 mg/m ³ 8 hours. STEL: 2 mg/m ³ 15 minutes.
1-methoxy-2-propanol	EU OEL (Europe, 1/2022). Absorbed through skin. Notes: list of indicative occupational exposure limit values TWA: 100 ppm 8 hours. TWA: 375 mg/m ³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 568 mg/m ³ 15 minutes.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures : Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

DNELs/DMELs

Product/ingredient name	Type	Exposure	Value	Population	Effects
methyl methacrylate	DNEL	Short term Dermal	1.5 mg/cm ²	General population	Local
	DNEL	Long term Dermal	1.5 mg/cm ²	General population	Local
	DNEL	Short term Dermal	1.5 mg/cm ²	Workers	Local
	DNEL	Long term Dermal	1.5 mg/cm ²	Workers	Local
	DNEL	Long term Oral	8.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	8.2 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	13.67 mg/	Workers	Systemic

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SECTION 8: Exposure controls/personal protection

methacrylic acid	DNEL	Long term Inhalation	kg bw/day 74.3 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	104 mg/m ³	General population	Local
	DNEL	Short term Inhalation	208 mg/m ³	General population	Local
	DNEL	Long term Inhalation	208 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	348.4 mg/m ³	Workers	Systemic
	DNEL	Short term Inhalation	416 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	6.55 mg/m ³	General population [Consumers]	Local
	DNEL	Long term Inhalation	6.3 mg/m ³	General population [Consumers]	Systemic
	DNEL	Long term Dermal	2.55 mg/kg bw/day	General population [Consumers]	Systemic
	DNEL	Long term Dermal	2.55 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	4.25 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	6.3 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	6.55 mg/m ³	General population	Local
	DNEL	Long term Inhalation	29.6 mg/m ³	Workers	Systemic
	oxydipropyl dibenzoate	DNEL	Long term Inhalation	88 mg/m ³	Workers
DNEL		Short term Dermal	1 %	General population	Local
DNEL		Short term Dermal	80 mg/kg bw/day	General population [Consumers]	Systemic
DNEL		Short term Inhalation	8.7 mg/m ³	General population [Consumers]	Systemic
DNEL		Short term Oral	80 mg/kg bw/day	General population [Consumers]	Systemic
DNEL		Long term Dermal	0.22 mg/kg bw/day	General population [Consumers]	Systemic
DNEL		Long term Oral	5 mg/kg bw/day	General population [Consumers]	Systemic
DNEL		Long term Inhalation	8.69 mg/m ³	General population [Consumers]	Systemic
DNEL		Long term Dermal	2.5 mg/kg bw/day	General population	Systemic
DNEL		Long term Oral	5 mg/kg bw/day	General population	Systemic
DNEL		Long term Inhalation	8.69 mg/m ³	General population	Systemic
DNEL		Short term Inhalation	8.7 mg/m ³	General population	Systemic
DNEL		Long term Inhalation	8.8 mg/m ³	Workers	Systemic

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SECTION 8: Exposure controls/personal protection

dibenzoyl peroxide	DNEL	Inhalation Long term Dermal	10 mg/kg bw/day	Workers	Systemic	
	DNEL	Short term Inhalation	35.08 mg/ m ³	Workers	Systemic	
	DNEL	Short term Oral	80 mg/kg bw/day	General population	Systemic	
	DNEL	Short term Dermal	80 mg/kg bw/day	General population	Systemic	
	DNEL	Short term Dermal	170 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	2.9 mg/m ³	General population [Consumers]	Systemic	
	DNEL	Long term Dermal	3.3 mg/kg bw/day	General population [Consumers]	Systemic	
	DNEL	Long term Oral	1.65 mg/ kg bw/day	General population [Consumers]	Systemic	
	DNEL	Long term Dermal	34 µg/cm ²	Workers	Local	
	DNEL	Long term Oral	2 mg/kg bw/day	General population	Systemic	
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	DNEL	Long term Dermal	13.3 mg/ kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	39 mg/m ³	Workers	Systemic	
	DNEL	Long term Oral	0.5 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.5 mg/kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	1 mg/kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	3.53 mg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	7.05 mg/m ³	Workers	Systemic	
	DNEL	Long term Oral	0.25 mg/ kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	0.42 mg/ kg bw/day	Workers	Systemic	
	DNEL	Long term Dermal	4.12 mg/ cm ²	Workers	Local	
dibutyl maleate	DNEL	Long term Inhalation	5.28 mg/m ³	Workers	Local	
	DNEL	Long term Inhalation	5.28 mg/m ³	Workers	Systemic	
	DNEL	Short term Dermal	24.2 mg/ kg bw/day	Workers	Systemic	
	DNEL	Long term Oral	1.0655 mg/ kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	1.0655 mg/ kg bw/day	General population	Systemic	
	DNEL	Long term Dermal	2.131 mg/ kg bw/day	Workers	Systemic	
	DNEL	Long term Inhalation	10 mg/m ³	Workers	Local	
	rosin	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic
		DNEL	Long term Inhalation	2.5 mg/m ³	General population	Systemic
		DNEL	Long term Inhalation	5 mg/m ³	Workers	Systemic
trizinc bis(orthophosphate)	DNEL	Long term Oral	0.83 mg/ kg bw/day	General population	Systemic	
	DNEL	Long term Inhalation	2.5 mg/m ³	General population	Systemic	
	DNEL	Long term Inhalation	5 mg/m ³	Workers	Systemic	

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SECTION 8: Exposure controls/personal protection

ethylenebis(oxyethylene) bis[3-(5-tert-butyl-4-hydroxy-m-tolyl) propionate]	DNEL	Inhalation Long term Dermal	83 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	83 mg/kg bw/day	Workers	Systemic
	DNEL	Long term Inhalation	3 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	3 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	4.3 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	43 mg/kg bw/day	General population	Systemic
	DNEL	Long term Dermal	86 mg/kg bw/day	Workers	Systemic
orthophosphoric acid	DNEL	Long term Oral	0.1 mg/kg bw/day	General population	Systemic
	DNEL	Long term Inhalation	0.36 mg/m ³	General population	Local
	DNEL	Long term Inhalation	1 mg/m ³	Workers	Local
	DNEL	Short term Inhalation	2 mg/m ³	Workers	Local
	DNEL	Long term Inhalation	4.57 mg/m ³	General population	Systemic
	DNEL	Long term Inhalation	10.7 mg/m ³	Workers	Systemic
	DNEL	Long term Oral	33 mg/kg bw/day	General population	Systemic
1-methoxy-2-propanol	DNEL	Long term Inhalation	43.9 mg/m ³	General population	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/m ³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/ m ³	Workers	Local
	DNEL	Short term Inhalation	553.5 mg/ m ³	Workers	Systemic
	DNEL	Short term Inhalation	553.5 mg/ m ³	Workers	Systemic

PNECs

Product/ingredient name	Compartment Detail	Value	Method Detail
methacrylic acid	Fresh water	0.82 mg/l	-
	Marine water	0.82 mg/l	-
oxydipropyl dibenzoate	Fresh water	0.0037 mg/l	-
	Marine water	0.00037 mg/l	-
	Fresh water sediment	1.49 mg/kg	-
	Marine water sediment	0.149 mg/kg	-
	Soil	1 mg/kg	-
	Sewage Treatment Plant	10 mg/kg	-
	dibenzoyl peroxide	Fresh water	0.000602 mg/l
Marine water		0.0000602 mg/l	-
Sewage Treatment Plant		0.35 mg/l	-
Fresh water sediment		0.338 mg/kg	-
rosin	Soil	0.0758 mg/kg	-
	Fresh water	0.005 mg/l	-
	Marine water	0.0005 mg/l	-
	Sewage Treatment	1000 mg/l	-

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SECTION 8: Exposure controls/personal protection

	Plant		
	Fresh water sediment	108 mg/kg dwt	-
	Marine water sediment	10.8 mg/kg dwt	-
	Soil	21.4 mg/kg dwt	-

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. 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 and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

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.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves. Refer to European Standard EN 1149 for further information on material and design requirements and test methods.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : 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.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

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	: Strong Acrylic
Odour threshold	: Not available.
Melting point/freezing point	: Not available.
Initial boiling point and boiling range	: Not available.
Flammability	: Not available.
Lower and upper explosion limit	: Not available.
Flash point	: Closed cup: 12°C (53.6°F)
Decomposition temperature	: Not available.
pH	: Not applicable.
Viscosity	: Kinematic (40°C): >40 mm ² /s
Solubility in water	: Not available.
Partition coefficient: n-octanol/water	: Not applicable.
Vapour pressure	: Not available.
Relative density	: 0.96 to 1.02
Vapour density	: Not available.
Explosive properties	: Not available.
Oxidising properties	: Not available.
<u>Particle characteristics</u>	
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 hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	: Avoid all possible sources of ignition (spark or flame). Do not pressurise, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition.
10.5 Incompatible materials	: Reactive or incompatible with the following materials: oxidising materials
10.6 Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

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SECTION 11: Toxicological information

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

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
methyl methacrylate	LC50 Inhalation Vapour	Rat	78000 mg/m ³	4 hours
	LD50 Dermal	Rabbit	>5 g/kg	-
	LD50 Oral	Rat	7872 mg/kg	-
methacrylic acid	LD50 Oral	Rat	1060 mg/kg	-
	oxydipropyl dibenzoate	Rat	>200 mg/l	4 hours
dibenzoyl peroxide	LC50 Inhalation Dusts and mists	Rabbit	>2000 mg/kg	-
	LD50 Dermal	Rat	3295 mg/kg	-
	LD50 Oral	Rat	>24300 mg/m ³	4 hours
dibutyl maleate	LC50 Inhalation Dusts and mists	Rat	6400 mg/kg	-
	LD50 Dermal	Rat	>5 mg/l	4 hours
rosin	LD50 Oral	Rabbit	10 g/kg	-
	LD50 Oral	Rat	3700 mg/kg	-
orthophosphoric acid	LD50 Oral	Rat	7600 mg/kg	-
	LD50 Dermal	Rabbit	2740 mg/kg	-
1-methoxy-2-propanol	LD50 Dermal	Rabbit	13 g/kg	-
	LD50 Oral	Rat	6600 mg/kg	-

Conclusion/Summary : Not available.

Acute toxicity estimates

Product/ingredient name	Oral (mg/kg)	Dermal (mg/kg)	Inhalation (gases) (ppm)	Inhalation (vapours) (mg/l)	Inhalation (dusts and mists) (mg/l)
Crestabond M1-05 400ml	15703.7	16296.2	N/A	N/A	N/A
methyl methacrylate	7872	N/A	N/A	78	N/A
methacrylic acid	1060	1100	N/A	N/A	N/A
oxydipropyl dibenzoate	3295	N/A	N/A	N/A	N/A
dibenzoyl peroxide	6400	N/A	N/A	N/A	N/A
dibutyl maleate	3700	10000	N/A	N/A	N/A
rosin	7600	N/A	N/A	N/A	N/A
orthophosphoric acid	N/A	2740	N/A	N/A	N/A
1-methoxy-2-propanol	6600	13000	N/A	N/A	N/A

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	Eyes - Severe irritant	Mammal - species unspecified	-	-	-
dibutyl maleate	Skin - Mild irritant	Rabbit	-	500 mg	-
1-methoxy-2-propanol	Skin - Mild irritant	Rabbit	-	500 mg	-

Conclusion/Summary : Not available.

Sensitisation

Product/ingredient name	Route of exposure	Species	Result
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	skin	Mammal - species unspecified	Sensitising

Conclusion/Summary : Not available.

Mutagenicity

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SECTION 11: Toxicological information

Conclusion/Summary : Not available.

Carcinogenicity

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
methyl methacrylate	Category 3	-	Respiratory tract irritation
methacrylic acid	Category 3	-	Respiratory tract irritation
1-methoxy-2-propanol	Category 3	-	Narcotic effects

Specific target organ toxicity (repeated exposure)

Product/ingredient name	Category	Route of exposure	Target organs
dibutyl maleate	Category 2	-	-

Aspiration hazard

Not available.

Information on likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye damage.

Inhalation : May cause respiratory irritation.

Skin contact : Causes severe burns. May cause an allergic skin reaction.

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
watering
redness

Inhalation : Adverse symptoms may include the following:
respiratory tract irritation
coughing

Skin contact : Adverse symptoms may include the following:
pain or irritation
redness
blistering may occur

Ingestion : Adverse symptoms may include the following:
stomach pains

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

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Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Product/ingredient name	Result	Species	Dose	Exposure
methacrylic acid	Chronic NOAEL Inhalation Gas.	Rat	300 ppm	90 days
	Chronic NOAEL Inhalation Gas.	Rat	100 ppm	90 days
oxydipropyl dibenzoate	Chronic NOAEL Oral	Rat	1000 mg/kg	90 days

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.

11.2 Information on other hazards

11.2.1 Endocrine disrupting properties

Not available.

11.2.2 Other information

Not available.

SECTION 12: Ecological information

12.1 Toxicity

Product/ingredient name	Result	Species	Exposure
methyl methacrylate	Acute LC50 130000 µg/l Fresh water	Fish - Pimephales promelas - Adult	96 hours
methacrylic acid	Chronic NOEC 53 mg/l Fresh water	Daphnia - Daphnia magna - Neonate	21 days
dibenzoyl peroxide	EC50 0.06 mg/l	Algae	72 hours
	EC50 0.11 mg/l	Daphnia	48 hours
	LC50 0.06 mg/l	Fish	96 hours
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	Acute EC50 >100 mg/l	Daphnia - Daphnia magna	48 hours
	Acute LC50 >100 mg/l	Fish	96 hours
dibutyl maleate	EC50 6.2 mg/l	Algae	72 hours
	EC50 21 mg/l	Daphnia	48 hours
rosin	Acute EC50 911 mg/l	Daphnia	48 hours
	Acute LC50 >1000 mg/l	Fish	96 hours
orthophosphoric acid	Acute EC50 105 ppm Fresh water	Daphnia - Daphnia magna	48 hours
	Acute LC50 138 ppm Fresh water	Fish - Gambusia affinis - Adult	96 hours

Conclusion/Summary : Not available.

12.2 Persistence and degradability

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SECTION 12: Ecological information

Product/ingredient name	Test	Result	Dose	Inoculum
methacrylic acid	-	86 % - 28 days	-	-
oxydipropyl dibenzoate	-	87 % - 28 days	-	-
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	OECD	71 % - Readily - 28 days	-	-
dibutyl maleate	-	95 % - Readily - 19 days	-	-
rosin	-	64 % - 28 days	-	-

Conclusion/Summary : Not available.

Product/ingredient name	Aquatic half-life	Photolysis	Biodegradability
methacrylic acid	-	-	Readily
oxydipropyl dibenzoate	-	-	Readily
dibenzoyl peroxide	-	-	Inherent
2-Propenoic acid, 2-methyl-, 2-hydroxyethyl ester, reaction products with phosphorus oxide	-	-	Readily
dibutyl maleate	-	-	Readily
rosin	-	-	Readily

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
methyl methacrylate	1.38	-	low
methacrylic acid	0.93	-	low
oxydipropyl dibenzoate	3.9	-	low
dibenzoyl peroxide	3.2	-	low
dibutyl maleate	3.39	1.91	low
rosin	1.9 to 7.7	56.3	low
trizinc bis(orthophosphate)	-	60960	high
1-methoxy-2-propanol	<1	-	low

Legal entity

Soil/water partition coefficient (K_{oc}) : 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 Endocrine disrupting properties

Not available.

12.7 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

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 : The classification of the product may meet the criteria for a hazardous waste.

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 or ID number	UN1133	UN1133	UN1133	UN1133
14.2 UN proper shipping name	ADHESIVES	ADHESIVES	ADHESIVES	Adhesives
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 kg.
Hazard identification number 30
Limited quantity 5 L
Special provisions 640E
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 640E

IMDG : The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg.
Emergency schedules F-E, S-D
Special provisions 223, 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

14.6 Special precautions for user : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to IMO instruments : Not available.

SECTION 15: Regulatory information

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

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

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.

15.2 Chemical safety assessment : This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

📌 Indicates information that has changed from previously issued version.

Abbreviations and acronyms

: ATE = Acute Toxicity Estimate
CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level
EUH statement = 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 according to Regulation (EC) No. 1272/2008 [CLP/GHS]

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SECTION 16: Other information

Classification	Justification
Flam. Liq. 2, H225 Skin Corr. 1A, H314 Eye Dam. 1, H318 Skin Sens. 1, H317 STOT SE 3, H335 Aquatic Chronic 2, H411	On basis of test data Calculation method Calculation method Calculation method Calculation method Calculation method

Full text of abbreviated H statements

H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H241	Heating may cause a fire or explosion.
H290	May be corrosive to metals.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
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.

Full text of classifications [CLP/GHS]

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

Date of printing : 10/02/2023

Date of issue/ Date of revision : 09/02/2023

Date of previous issue : 09/02/2023

Version : 0.02

Notice to reader

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SECTION 16: Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named 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.