

Safety Data Sheet according to UN-GHS

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1. Identification

Product identifier: ACRIFIX® 1R 0192

Other means of identification

Recommended use: For use in industrial installations or professional treatment only.
Polymerising adhesive for PLEXIGLAS®

Recommended restrictions: Product not intended for consumers Applications where liquid monomer is intended to come into contact with skin or nails.

Manufacturer/Importer/Distributor Information

Company Name: Röhm GmbH
Product Stewardship
Deutsche-Telekom-Allee 9
64295 Darmstadt

Telephone: +49 6151 863 7542

E-mail: sds-info@roehm.com

Emergency telephone number:

24-Hour Health Emergency: +49 6241 402 5280 (24h)

2. Hazard(s) identification

Classification according to GHS

Physical Hazards

Flammable liquids Category 2

Health Hazards

Acute toxicity Category 5
(Inhalation - vapor)

Skin Corrosion/Irritation Category 2

Skin sensitizer Category 1

Specific Target Organ Toxicity Category 3
- Single Exposure (Respiratory tract irritation.)

Environmental Hazards

Acute hazards to the aquatic environment Category 3

Label Elements

Hazard Symbol:



Signal Word:	Danger
Hazard Statement:	Highly flammable liquid and vapor. May be harmful if inhaled. Causes skin irritation. May cause an allergic skin reaction. May cause respiratory irritation. Harmful to aquatic life.
Precautionary Statements Prevention:	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wear protective gloves/protective clothing/eye protection/face protection.
Response:	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. If skin irritation or rash occurs: Get medical advice/attention. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/ physician if you feel unwell. IF exposed or concerned: Get medical advice/attention. Take off immediately all contaminated clothing and wash it before reuse. In case of fire: Use foam for extinction.
Storage:	Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal:	Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.
Supplemental label information Only for professional and industrial use	

Other hazards:	Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. Take precautionary measures against static discharges.
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3. Composition/information on ingredients

Mixtures

Chemical Identity	Common name and synonyms	CAS number	Content in percent (%)*
Methyl methacrylate	Methyl 2-methylprop-2-enoate	80-62-6	60 - <90%
Bis(isopropyl) thioperoxydicarbonate	Thioperoxydicarbonic acid ([[(HO)C(S)] ₂ S ₂), bis (1-methylethyl) ester	105-65-7	0,1 - <1%
Ethyl phenyl(2,4,6-trimethylbenzoyl) phosphinate	Phosphinic acid, phenyl (2,4,6-trimethylbenzoyl)-, ethyl ester	84434-11-7	0,1 - <1%
Pentaerithrithol tetra (mercaptoacetate)	3-[[[(2-sulfanylacetyl)oxy]-2,2-bis({[(2-sulfanylacetyl)oxy]methyl})propyl 2-sulfanylacetate	10193-99-4	0,01 - <0,1%

* All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

The exact concentration has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

General information:	First aider needs to protect himself. Take off all contaminated clothing immediately. Medical treatment is necessary if symptoms occur which are obviously caused by skin or eye contact with the product or by inhalation of its vapours.
Inhalation:	Move subject to fresh air and keep him calm. See a physician. If respiratory problems, artificial respiration/oxygen.
Skin Contact:	Wash off immediately with soap and water. If skin irritation occurs consult a physician. Take off all contaminated clothing immediately. Wash clothing before reuse.
Eye contact:	Keeping the eyelids apart flush thoroughly with water immediately. If irritation persists, contact a physician.
Ingestion:	Do not induce vomiting and seek medical advice immediately. Never give anything by mouth to an unconscious person.
Personal Protection for First-aid Responders:	No data available.

Most important symptoms and effects, both acute and delayed

Symptoms:	Skin sensitizer Causes skin and eye irritation. Headache. confusion.
Hazards:	May be harmful if inhaled. May cause sensitization by skin contact.

Indication of immediate medical attention and special treatment needed

Treatment:	Treat symptomatically.
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5. Fire-fighting measures

General Fire Hazards:	Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Keep unauthorized personnel away. Vapours are heavier than air and can form an explosive mixture with air. Move containers from fire area if you can do so without risk. Use water spray to keep fire-exposed containers cool. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Prevent fire extinguishing water from contaminating surface water or the ground water system.
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Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	foam Dry chemical.
Unsuitable extinguishing media:	High volume water jet

Special hazards arising from the substance or mixture:

Closed container may rupture if strongly heated. Vapours are heavier than air and may spread along floors. May be released in case of fire: carbon monoxide, carbon dioxide, sulphur oxides, organic products of decomposition. Oxides of phosphorus.

Special protective equipment and precautions for fire-fighters
Special fire-fighting procedures:

Keep away from sources of ignition - No smoking. Take action to prevent static discharges. In the event of fire, cool the endangered containers with water. When heated above the flash point and/or during spraying (atomizing), ignitable mixtures may form in air. Use only explosion-proof equipment.

Special protective equipment for fire-fighters:

Wear self-contained breathing apparatus.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures:

Evacuate personnel to safe areas. Assure sufficient ventilation. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Avoid contact with eyes, skin, and clothing. Use personal protective clothing. Keep away sources of ignition. Do not breathe vapours or spray mist. Wash hands thoroughly with soap and water after handling.

Accidental release measures:

Evacuate area and do not approach spilled product. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). For personal protection see section 8.

For emergency responders:

Avoid contact with eyes, skin, and clothing. Do not inhale vapours / aerosols. Observe regulations on prevention of water pollution (check, dam up, cover up).

Methods and material for containment and cleaning up:

Larger quantities: Remove mechanically (by pumping). Use explosion-proof equipment! Smaller quantities and/or residues: Contain with absorbent material (e.g. sand, diatomaceous earth, acid absorbent, universal absorbent or sawdust). Dispose of in accordance with regulations.

Environmental Precautions:

Prevent product from getting into drains/surface water/groundwater. If the product contaminates rivers and lakes or drains inform respective authorities.

7. Handling and storage
Handling
Technical measures:

Install appropriate equipment and wear appropriate personal protective equipment (see "8. Exposure control/personal protection").

Local/Total ventilation:

Use explosion-proof electrical, ventilating and lighting equipment.

Safe handling advice:

Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment. Keep container tightly closed. Provide sufficient ventilation and exhaust at the workplace. Do not inhale exhaust fumes, vapors, sprays or aerosols. No eating, drinking, smoking, or snuffing tobacco at work. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling. Follow all

SDS/label precautions even after container is emptied because it may retain product residues. Keep away from sources of ignition - No smoking. Take action to prevent static discharges. In the event of fire, cool the endangered containers with water. When heated above the flash point and/or during spraying (atomizing), ignitable mixtures may form in air. Use only explosion-proof equipment. Refer to section 15 for specific national regulation.

Contact avoidance measures:

see section 8. see section 10.

Storage

Safe storage conditions:

Keep only in the original container at a temperature not exceeding 30 °C. Protect from the action of light. Fill the container by approximately 90 % only as oxygen (air) is required for stabilisation. With large storage containers make sure the oxygen (air) supply is sufficient to ensure stability. Can polymerize with intense heat release. Observe prohibition against storing together! see also section 10.

Safe packaging materials:

No data available.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

Chemical Identity	Type	Exposure Limit Values	Source
Methyl methacrylate	TWA	50 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)
	STEL	100 ppm	US. ACGIH Threshold Limit Values, as amended (03 2016)

Please refer to the latest edition of the appropriate source text and consult an industrial hygienist or similar professional, or local agencies, for further information.

Observe national threshold limit values.

Biological Limit Values

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

Appropriate Engineering Controls

For monitoring procedures refer for instance to "Empfohlene Analysenverfahren für Arbeitsplatzmessungen", Schriftenreihe der Bundesanstalt für Arbeitsschutz and "NIOSH Manual of Analytical Methods", National Institute for Occupational Safety and Health

Individual protection measures, such as personal protective equipment

General information:

No data available.

Eye/face protection:

Tightly fitting safety goggles Ensure that eyewash stations and safety showers are close to the workstation location.

Hand Protection:	<p>Material: butyl rubber gloves (minimal thickness 0.3 mm) Break-through time: 60 min Guideline: EN 374 Material: neoprene gloves Additional Information: Suitable as spray protection. Additional Information: For each work-place a suitable glove type has to be selected., Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time., As the product is a mixture of several substances, the durability of the glove materials cannot be calculated in advance and has to be tested before use., Gloves should be discarded and replaced if there is any indication of degradation or chemical breakthrough.</p>
Other:	<p>Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. On handling of larger quantities: face mask, chemical-resistant boots and apron</p>
Respiratory Protection:	Breathing apparatus in case of high concentrations
Hygiene measures:	<p>Take off all contaminated clothing immediately. Store work clothing separately. Follow the usual good standards of occupational hygiene. Clean skin thoroughly after work; apply skin cream. Take off contaminated clothing and wash it before reuse. Contaminated work clothing should not be allowed out of the workplace.</p>

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Forem:	viscous
Color:	Violet
Odor:	ester-like
Odor Threshold:	No data available
Freezing point:	approx. -54 °F/-48 °C (estimated)
Boiling Point:	approx. 212 °F/100 °C (1.013 hPa)
Flammability:	Highly flammable liquid and vapor.

Upper/lower limit on flammability or explosive limits

Explosive limit - upper:	12,5 %(V) (methyl methacrylate)
Explosive limit - lower:	2,1 %(V) at 10,5°C / 33,8°F (methyl methacrylate)

Flash Point:	47,3 °F/8,5 °C (DIN 51 755)
Autoignition Temperature:	815 °F/435 °C (DIN 51794) (methyl methacrylate)
Decomposition Temperature:	Not applicable Polymerisation can occur.
pH:	7 - 8 in Water

Viscosity

Dynamic viscosity:	1.600 - 2.000 mPa.s (68 °F/20 °C, Brookfield)
Kinematic viscosity:	1568 - 1960 mm ² /s (68 °F/20 °C, calculated)
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	approx. 16 g/l (68 °F/20 °C)
Solubility (other):	No data available.

Information on basic physical and chemical properties

Appearance

Physical state:	liquid
Forem:	viscous
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Odor:	ester-like
Odor Threshold:	No data available
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Kinematic viscosity:	1568 - 1960 mm ² /s (68 °F/20 °C, calculated)
Flow Time:	No data available.

Solubility(ies)

Solubility in Water:	approx. 16 g/l (68 °F/20 °C)
Solubility (other):	No data available.
Partition coefficient (n-octanol/water):	Not applicable
Vapor pressure:	approx. 40 hPa (68 °F/20 °C)
Relative density:	No data available. Density: approx. 1,02 g/cm ³ (68 °F/20 °C)
Bulk density:	No data available.
Relative vapor density:	No data available.

Other information

Explosive properties:	Not explosive Information is based on the substance structure or composition. Vapours may form explosive mixtures with air
Impact sensitivity:	No data available.
Evaporation Rate:	> 1 (butyl acetate = 1)

10. Stability and reactivity

Reactivity:	Polymerisation can occur.
Chemical Stability:	This material is considered stable under specified conditions of storage, shipment and/or use. The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.
Possibility of hazardous reactions:	Polymerization with heat evolution may occur in the presence of radical forming substances (e.g. peroxides), reducing substances, and/or heavy metal ions. The same applies to the effect of light or UV-light respectively.
Conditions to avoid:	Ultraviolet light. Solar radiation, heat, heat exposure, spark formation.

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Incompatible Materials:	Peroxides, amines, sulfur compounds, heavy metal ions, alkalis, reducing agents and oxidizing agents. Mineral Acid Free radical initiators. Strong acids.
Hazardous Decomposition Products:	None when used as directed.

11. Toxicological information

Information on toxicological effects

Inhalation:	May be harmful if inhaled.
Skin Contact:	Causes skin irritation.
Eye contact:	Eye may become red, tear, and become painful.
Ingestion:	If handled correctly, not a relevant route of exposure. Information on effects are given below.

Information on likely routes of exposure

Acute toxicity (list all possible routes of exposure)

Oral

Product:	ATEmix: > 5.000 mg/kg (Calculation method) Not classified for acute toxicity based on available data.
Components:	
methyl methacrylate	LD 50 (Rat): > 5.000 mg/kg
Bis(isopropyl) thioperoxydicarbonate	LD 50 (Rat): > 1.500 mg/kg
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	LD 50 (Rat): > 5.000 mg/kg
Pentaerithrithol tetra (mercaptoacetate)	LD 50 (Rat): > 1.000 mg/kg

Dermal

Product:	ATEmix: > 5.000 mg/kg (Calculation method) Not classified for acute toxicity based on available data.
Components:	
methyl methacrylate	LD 50 (Rabbit): > 5.000 mg/kg
Bis(isopropyl) thioperoxydicarbonate	Not classified for acute toxicity based on available data., The substance or mixture has no acute dermal toxicity, Dermal exposure is not expected.
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	LD 50 (Rat): > 2.000 mg/kg
Pentaerithrithol tetra (mercaptoacetate)	moderately toxic after single exposure

Inhalation

Product:	Acute toxicity estimate: > 40 mg/l Vapour; Acute inhalation toxicity category 5 (UN-GHS)
Components:	
methyl methacrylate	LC 50 (Rat, 4 h): 29,8 mg/l low toxicity after single exposure; Vapour Not toxic after single exposure; Dust and mist, Not applicable
Bis(isopropyl) thioperoxydicarbonate	Not toxic after single exposure; Vapour, Not classified for acute toxicity based on available data., Inhalative exposure is not expected. Not toxic after single exposure; Dust and mist, Not classified for acute toxicity based on available data., Inhalative exposure is not expected.
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	Not toxic after single exposure; Vapour, Not classified for acute toxicity based on available data. Not toxic after single exposure; Dust and mist, Not classified for acute toxicity based on available data.
Pentaerithrithol tetra (mercaptoacetate)	moderately toxic after single exposure; moderately toxic after single exposure, Vapour Not toxic after single exposure;

Repeated dose toxicity

Product:	No data available.
Components:	
methyl methacrylate	NOAEL (Rat, Inhalativ, 2 years): 25 ppm Findings: Damage to mucous membranes in the nose at 400 ppm NOAEL (Rat, Oral, 2 years): 2000 ppm Findings: no toxic effects
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Skin Corrosion/Irritation

Product:	Calculation method Irritating to skin.;
Components:	
methyl methacrylate	(Rabbit): non-irritant , 4 h (Human): Irritating.
Bis(isopropyl) thioperoxydicarbonate	OECD 404 (Guinea Pig): Irritating
Ethyl phenyl(2,4,6- trimethylbenzoyl)phosphinate	OECD 404 (Rabbit): Not irritating
Pentaerithrithol tetra (mercaptoacetate)	OECD 404 Not irritating

Serious Eye Damage/Eye Irritation

Product:	Calculation method, Based on available data, the classification criteria are not met.
Components:	
methyl methacrylate	Not irritating OECD 405, FDA 1959 Draize , Rabbit:
Bis(isopropyl) thioperoxydicarbonate	Not Classified no OECD method. , Rabbit: read-across from an in vivo study with an analogue

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Not irritating analogous OECD method, Rabbit:

Pentaerithrithol tetra (mercaptoacetate) Not irritating OECD 405,

Respiratory or Skin Sensitization

Product: May cause an allergic skin reaction. The value is calculated

Components:

methyl methacrylate Local Lymph Node Assay (LLNA), LLNA (OECD 429) (Mouse): Skin sensitizer
Cases of sensitisation also observed in humans.
Not classified for respiratory sensitization

Bis(isopropyl) thioperoxydicarbonate in vivo, OECD 406 (Guinea Pig): May cause sensitization by skin contact.

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Local Lymph Node Assay (LLNA), OECD 429 (Mouse): Skin sensitizer
Not classified for respiratory sensitization

Pentaerithrithol tetra (mercaptoacetate) Local Lymph Node Assay (LLNA), LLNA (OECD 429) (Mouse): Strong skin sensitizer.

Carcinogenicity

Product: Based on available data, the classification criteria are not met. The value is calculated

Components:

methyl methacrylate Not classified Non-carcinogenic in inhalation and feeding studies carried out on rats, mice and dogs.

Bis(isopropyl) thioperoxydicarbonate Not classified

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Not classified

Pentaerithrithol tetra (mercaptoacetate) Not classified

Germ Cell Mutagenicity

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

The value is calculated

In vitro

Product: No data available.

Components:

methyl methacrylate gene mutation (OECD 471): negative
gene mutation (OECD 476): negative , Chinese hamster lung fibroblasts (V79)
Micronucleus test (OECD 487): negative , human lymphocytes

Bis(isopropyl) thioperoxydicarbonate Bacterial reverse mutation assay (OECD 471): negative

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate Micronucleus test (OECD 487): negative Not classified

Pentaerithrithol tetra (mercaptoacetate) Not classified

In vivo**Product:**

No data available.

Components:

methyl methacrylate gene mutation (Dominant lethal test) Inhalativ (Mouse): negative

Bis(isopropyl)
thioperoxydicarbonate No data available.Ethyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate No data available.Pentaerithrithol tetra
(mercaptoacetate) Not classified**Reproductive toxicity****Product:**

Based on available data, the classification criteria are not met. The value is calculated

Components:

methyl methacrylate Not classified No indications of toxic effects were observed in reproduction studies in animals. OECD 414 OECD 416 Oral

Bis(isopropyl)
thioperoxydicarbonate Not classifiedEthyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate Not classifiedPentaerithrithol tetra
(mercaptoacetate) Not classified**Specific Target Organ Toxicity****- Single Exposure****Product:**

May cause respiratory irritation. Specific target organ toxicity – single exposure Category 3 (UN-GHS) The value is calculated

Components:

methyl methacrylate Inhalation - vapor: Category 3 with respiratory tract irritation.

Bis(isopropyl)
thioperoxydicarbonate Not classifiedEthyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate Not classifiedPentaerithrithol tetra
(mercaptoacetate) Not classified**Specific Target Organ Toxicity -****Repeated Exposure****Product:**

Based on available data, the classification criteria are not met. The value is calculated

Components:

methyl methacrylate Not classified

Bis(isopropyl)
thioperoxydicarbonate Not classifiedEthyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate Not classifiedPentaerithrithol tetra
(mercaptoacetate) Not classified

Aspiration Hazard

Product: Based on available data, the classification criteria are not met.

Components:

methyl methacrylate Not classified

Bis(isopropyl)
thioperoxydicarbonate Not classified

Ethyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate Not classified

Pentaerithrithol tetra
(mercaptoacetate) Not classified

Information on health hazards

Other hazards

Product: Carefully avoid contact with skin and eyes as well as inhalation of product vapours. No tests were performed with this mixture. The properties of this product which are hazardous to health have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification".;

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

Fish:

Product: No data available.

Components:

methyl methacrylate LC 50 (96 h): > 100 mg/l Expert judgement

Bis(isopropyl)
thioperoxydicarbonate No toxicity at the limit of solubility

Ethyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate LC 50 (Danio rerio (zebra fish), 96 h): 1,89 mg/l

Pentaerithrithol tetra
(mercaptoacetate) LC 50 (48 h): 4,3 mg/l

Aquatic Invertebrates

Product: No data available.

Components:

methyl methacrylate EC 50 (Daphnia magna (Water flea), 48 h): 69 mg/l

Bis(isopropyl)
thioperoxydicarbonate No toxicity at the limit of solubility

Ethyl phenyl(2,4,6-
trimethylbenzoyl)phosphinate EC 50 (Daphnia magna (Water flea), 48 h): 2,26 mg/l

Pentaerithrithol tetra
(mercaptoacetate) EC 50 (Daphnia magna (Water flea), 48 h): 1,06 mg/l

Toxicity to Aquatic Plants

Product: No data available.

Components:

methyl methacrylate	EC 50 (<i>Selenastrum capricornutum</i> (green algae), 72 h): > 100 mg/l (OECD 201)
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	EC 50 (<i>Desmodesmus subspicatus</i> (green algae), 72 h): 1,01 mg/l (OECD 201)
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Toxicity to microorganisms**Product:**

No data available.

Components:

methyl methacrylate	EC3 (<i>Pseudomonas putida</i> , 16 h): 100 mg/l (cell proliferation inhibition test, Bringmann-Kühn)
Bis(isopropyl) thioperoxydicarbonate	No toxicity at the limit of solubility
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	EC 50 (activated sludge, 3 h): > 1.000 mg/l (OECD 209)
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Chronic hazards to the aquatic environment:**Fish:****Product:**

No data available.

Components:

methyl methacrylate	NOEC (<i>Danio rerio</i> (zebra fish)): 9,4 mg/l (OECD 210)
Bis(isopropyl) thioperoxydicarbonate	No toxicity at the limit of solubility
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Aquatic Invertebrates**Product:**

No data available.

Components:

methyl methacrylate	NOEC (<i>Daphnia magna</i> (Water flea), 21 d): 37 mg/l (OECD 202 part 2)
Bis(isopropyl) thioperoxydicarbonate	No toxicity at the limit of solubility
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

BOD/COD Ratio	
Product:	
Components:	
No data available.	
Toxicity to Aquatic Plants	
Product:	
Components:	
methyl methacrylate	NOEC (Selenastrum capricornutum (green algae), 72 h): > 110 mg/l (OECD 201)
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Toxicity to microorganisms	
Product:	
Components:	
No data available.	
methyl methacrylate	EC3 (Pseudomonas putida, 16 h): 100 mg/l (cell proliferation inhibition test, Bringmann-Kühn)
Bis(isopropyl) thioperoxydicarbonate	No toxicity at the limit of solubility
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	EC 50 (activated sludge, 3 h): > 1.000 mg/l (OECD 209)
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Persistence and Degradability

Biodegradation

Product:	
Components:	
No data available.	
methyl methacrylate	94 % (14 d, OECD 301 C), easily biodegradable
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	10 % (28 d), Not readily degradable.
Pentaerithrithol tetra (mercaptoacetate)	22,4 % (28 d, OECD 301 B) Inherently biodegradable

BOD/COD Ratio

Product:	
Components:	
No data available.	
methyl methacrylate	No data available.
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Bioaccumulative potential Bioconcentration Factor (BCF)

Product:	No data available.
Components:	
methyl methacrylate	Accumulation in organisms is not expected due to the coefficient of distribution of n-octanol in water (log Pow).
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	Bioconcentration Factor (BCF): 16,4 (calculated)

Partition Coefficient n-octanol / water (log Kow)

Product:	Log Kow: Not applicable
Components:	
methyl methacrylate	Log Kow: 1,38 20 °C (Measured)
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	Log Kow: 2,91 25 °C
Pentaerithrithol tetra (mercaptoacetate)	Log Kow: 1,9 25 °C (calculated)

Mobility in soil:

Product:	No data available.
Components:	
methyl methacrylate	Binding to the solid soil phase, sediment or clarification sludge is not expected. The substance evaporates gradually into the atmosphere from the surface of the water. If the substance does get into the environment, it tends to remain in the compartment it was discharged into.
Bis(isopropyl) thioperoxydicarbonate	No data available.
Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate	No data available.
Pentaerithrithol tetra (mercaptoacetate)	No data available.

Results of PBT and vPvB assessment

Product:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.
Components:	
methyl methacrylate	Non-classified vPvB substance Non-classified PBT substance
Bis(isopropyl) thioperoxydicarbonate	Non-classified PBT substance Non-classified vPvB substance

Ethyl phenyl(2,4,6-trimethylbenzoyl)phosphinate

No data available.

Pentaerithrithol tetra (mercaptoacetate)

Non-classified PBT substance,
Non-classified vPvB substance

Other adverse effects:

Other hazards

Product:

Prevent substance from entering soil, natural bodies of water and sewer systems. The properties of this product which are characteristics posing a threat to the environment have been calculated as per regulation (EC) No. 1272/2008. See section 2 "Hazards Identification". No ecotoxicological data is available for this product.

13. Disposal considerations

General information:

Dispose of waste and residues in accordance with local authority requirements.

Disposal methods:

Waste is hazardous. It must be disposed of in accordance with the regulations after consultation of the competent local authorities and the disposal company in a suitable and licensed facility. Strictly controlled conditions during disposal or treatment to air, wastewater and waste. Do not add wastewater to a biological wastewater treatment plant. Bring wastewater containing AOX for professional disposal. The waste key number must be determined as per the European Waste Types List (decision on EU Waste Types List 2000/532/EC) in cooperation with the disposal firm / producing firm / official authority.

Contaminated Packaging:

Contaminated packaging should ideally be emptied; it can then be recycled after having been decontaminated. Packaging that cannot be cleaned should be disposed of professionally. Uncontaminated packaging may be taken for recycling.

14. Transport information

International Regulations

IATA-DGR

UN/ID No.	UN 1133
Proper shipping name	Adhesives stabilized
Class	3
Packing group	II
Labels	3
Packing instruction (cargo aircraft)	364
Packing instruction (passenger aircraft)	353
Remarks	FOR USA ONLY: When shipping in, by or via USA note of the Reportable Quantity-Regulation!

IMDG-Code

UN number	UN 1133
Proper shipping name	ADHESIVES STABILIZED
Class	3
Packing group	II
Labels	3
EmS Code	F-E, S-D
Marine pollutant	no
Remarks	FOR USA ONLY: When shipping in, by or via USA note of the Reportable Quantity-Regulation!

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

15. Regulatory information

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

16. Other information, including date of preparation or last revision

Issue Date: 25.03.2019

Version #: 5.0

Further Information: The product is normally supplied in a stabilized form. If the permissible storage period and/or storage temperature is exceeded, the product may polymerize with heat evolution.

Disclaimer: This information and all further technical advice is based on our present knowledge and experience. However, it implies no liability or other legal responsibility on our part, including with regard to existing third party intellectual property rights, especially patent rights. In particular, no warranty, whether express or implied, or guarantee of product properties in the legal sense is intended or implied. We reserve the right to make any changes according to technological progress or further developments. The customer is not released from the obligation to conduct careful inspection and testing of incoming goods. Performance of the product described herein should be verified by testing, which should be carried out only by qualified experts in the sole responsibility of a customer. Reference to trade names used by other companies is neither a recommendation, nor does it imply that similar products could not be used.