

SAFETY DATA SHEET

According to Regulation (EC) No. 1907/2006 (REACH) Article 31, Annex II as amended.

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

1.1 Product identifier

Product name: ANAPURNA 200 RTR CYAN LIGHT INK **Product No.:** 000001016277

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

Identified uses: Printing ink

Uses advised against: Reserved for industrial and professional use.

1.3 Details of the supplier of the safety data sheet

Manufacturer

Agfa Graphics NV
Septestraat 27
2640 Mortsel
Belgium

Telephone: +32 3 4442111

Fax: +32 3 4447094

E-mail: electronic.sds@agfa.com

National Supplier

Agfa-Gevaert Ltd.
Vantage West
Great West Road
Brentford, Middlesex TW8 9AX
United Kingdom

Telephone: +44 (0)20 8 231 4616

Fax: +44 (0)20 8 231 4951

E-mail: electronic.sds@agfa.com

1.4 Emergency telephone number:

Emergency telephone number (Belgium) : +32 3 4443333 (24h/24h)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

The product has been classified according to the legislation in force.

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

Health Hazards

| | | |
|--------------------|------------|--|
| Skin irritation | Category 2 | H315: Causes skin irritation. |
| Serious eye damage | Category 1 | H318: Causes serious eye damage. |
| Skin sensitizer | Category 1 | H317: May cause an allergic skin reaction. |

| | | |
|--|-------------|--|
| Toxic to reproduction | Category 1B | H360FD: May damage fertility. May damage the unborn child. |
| Specific Target Organ Toxicity - Single Exposure | Category 3 | H335: May cause respiratory irritation. |

Environmental Hazards

| | | |
|--|------------|--|
| Chronic hazards to the aquatic environment | Category 3 | H412: Harmful to aquatic life with long lasting effects. |
|--|------------|--|

2.2 Label Elements

Contains: Oxybis(methyl-2,1-ethanediyl) diacrylate
 ethoxylated trimethylolpropane triacrylate
 Isodecyl acrylate
 Timethylolpropane triacrylate
 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one



Signal Words: Danger

Hazard Statement(s): H315: Causes skin irritation.
 H317: May cause an allergic skin reaction.
 H318: Causes serious eye damage.
 H335: May cause respiratory irritation.
 H360FD: May damage fertility. May damage the unborn child.
 H412: Harmful to aquatic life with long lasting effects.

Precautionary Statements

Prevention: P201: Obtain special instructions before use.
 P261: Avoid breathing dust/fume/gas/mist/vapors/spray.
 P273: Avoid release to the environment.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response: P333+P313: If skin irritation or rash occurs: Get medical advice/attention.
 P340: Remove person to fresh air and keep comfortable for breathing.
 P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

2.3 Other hazards Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria

SECTION 3: Composition/information on ingredients

3.2 Mixtures

General information: No data available.

| Chemical name | Concentration | CAS-No. | EC No. | REACH Registration No. | M-Factor: | Notes |
|--|---------------|------------|-----------|------------------------|--------------------|-------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | 20 - <50% | 57472-68-1 | 260-754-3 | 01-2119484629-21-XXXX | No data available. | |
| ethoxylated trimethylolpropane triacrylate | 20 - <50% | 28961-43-5 | | 01-2119489900-30-XXXX | No data available. | |
| Isodecyl acrylate | 10 - <20% | 1330-61-6 | 215-542-5 | 01-2119964031-47-XXXX | No data available. | |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 5 - <10% | 71868-10-5 | 400-600-6 | 01-2119472306-39 | No data available. | |
| Trimethylolpropane triacrylate | 5 - <10% | 15625-89-5 | 239-701-3 | 01-2119489896-11-XXXX | No data available. | |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | 0.1 - <0.25% | 128-37-0 | 204-881-4 | 01-2119565113-46-0000 | 1 | # |
| Cetrimonium chloride | 0.01 - <1% | 112-02-7 | 203-928-6 | No data available. | 10 | |

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

This substance has workplace exposure limit(s).

PBT: persistent, bioaccumulative and toxic substance.

vPvB: very persistent and very bioaccumulative substance.

Classification

| Chemical name | Classification | Notes |
|--|--|-------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | Skin Sens.: 1: H317 Eye Dam.: 1: H318 Skin Irrit.: 2: H315 | |
| ethoxylated trimethylolpropane triacrylate | Eye Irrit.: 2: H319 Skin Sens.: 1: H317 | |

| | | |
|--|--|--------------------|
| Isodecyl acrylate | Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 Aquatic Chronic: 2: H411 STOT SE: 3: H335 | Note A |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | Acute Tox.: 4: H302 Repr.: 1B: H360FD Aquatic Chronic: 2: H411 | No data available. |
| Timethylolpropane triacrylate | Eye Irrit.: 2: H319 Skin Irrit.: 2: H315 Skin Sens.: 1: H317 | Note D |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | Aquatic Acute: 1: H400 Aquatic Chronic: 1: H410 | No data available. |
| Cetrimonium chloride | Acute Tox.: 4: H302 Acute Tox.: 3: H311 Skin Corr.: 1: H314 Eye Dam.: 1: H318 Aquatic Acute: 1: H400 Aquatic Chronic: 1: H410 | |

CLP: Regulation No. 1272/2008.

SECTION 4: First aid measures

General: CAUTION! First aid personnel must be aware of own risk during rescue!

4.1 Description of first aid measures

Inhalation: Move to fresh air.

Eye contact: Rinse immediately with plenty of water.

Skin Contact: Destroy or thoroughly clean contaminated shoes. Immediately remove contaminated clothing and shoes and wash skin with soap and plenty of water. If skin irritation or an allergic skin reaction develops, get medical attention.

Ingestion: Rinse mouth thoroughly.

4.2 Most important symptoms and effects, both acute and delayed: See section 11 of the SDS for additional information on health hazards.

4.3 Indication of any immediate medical attention and special treatment needed

Hazards: See section 11 of the SDS for additional information on health hazards.

Treatment: Get medical attention if symptoms occur.

SECTION 5: Firefighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

5.1 Extinguishing media

Suitable extinguishing media: Extinguish with foam, carbon dioxide, dry powder or water fog.

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: During fire, gases hazardous to health may be formed.

5.3 Advice for firefighters
Special fire fighting procedures: No data available.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: See Section 8 of the SDS for Personal Protective Equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep unauthorized personnel away.

6.2 Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe to do so.

6.3 Methods and material for containment and cleaning up: Stop the flow of material, if this is without risk. Absorb with sand or other inert absorbent.

6.4 Reference to other sections: For personal protection see section 8. For waste disposal, see section 13 of the SDS.

SECTION 7: Handling and storage:

7.1 Precautions for safe handling: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as required. Avoid contact with eyes, skin, and clothing. Wash hands thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities: Store locked up.

7.3 Specific end use(s): Reserved for industrial and professional use.

SECTION 8: Exposure controls/personal protection

8.1 Control Parameters Occupational Exposure Limits

| Chemical name | type | Exposure Limit Values | Source |
|--|------|-----------------------|---|
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | TWA | 10 mg/m ³ | UK. EH40 Workplace Exposure Limits (WELs) (12 2011) |

Biological Limit Values

None.

DNEL-Values

| Critical component | type | Route of Exposure | | Remarks |
|--|--------------------|-------------------|-------------------------|-----------------------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | General population | Dermal | 1.66 mg/kg | Repeated dose toxicity |
| | General population | Oral | 2.08 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 24.48 mg/m ³ | Repeated dose toxicity |
| | Workers | Dermal | 2.77 mg/kg | Repeated dose toxicity |
| | General population | Inhalation | 7.24 mg/m ³ | Repeated dose toxicity |
| | General population | Oral | 1.4 mg/kg | Repeated dose toxicity |
| ethoxylated trimethylolpropane triacrylate | Workers | Dermal | 0.8 mg/kg | Repeated dose toxicity |
| | General population | Inhalation | 4.9 mg/m ³ | Repeated dose toxicity |
| | General population | Dermal | 0.5 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 16.2 mg/m ³ | Repeated dose toxicity |
| Isodecyl acrylate | Workers | Dermal | 370 µg/cm ² | Skin sensitization |
| | Workers | Inhalation | 37.5 mg/m ³ | Irritating to respiratory system. |
| Timethylolpropane triacrylate | Workers | Dermal | 0.8 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 16.2 mg/m ³ | Repeated dose toxicity |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | General population | Dermal | 0.1 mg/kg | Repeated dose toxicity |
| | Workers | Dermal | 20 mg/kg | Acute toxicity |
| | General population | Inhalation | 0.16 mg/m ³ | Repeated dose toxicity |
| | Workers | Dermal | 0.1 mg/kg | Repeated dose toxicity |
| | General population | Dermal | 0.09 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 0.32 mg/m ³ | Repeated dose toxicity |
| | Workers | Dermal | 0.18 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 5.38 mg/m ³ | Acute toxicity |
| | General population | Oral | 0.05 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 4 mg/m ³ | Repeated dose toxicity |
| blue organic pigment | General population | Dermal | 225 mg/kg | Repeated dose toxicity |
| | General population | Oral | 45 mg/kg | Repeated dose toxicity |
| | Workers | Dermal | 450 mg/kg | Repeated dose toxicity |
| | General population | Dermal | 0.25 mg/kg | Repeated dose toxicity |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | Workers | Dermal | 8.3 mg/kg | |
| | General population | Inhalation | 1.74 mg/m ³ | |
| | Workers | Dermal | 0.3 mg/kg | |
| | Workers | Dermal | 0.5 mg/kg | Repeated dose toxicity |
| | General population | Dermal | 0.17 mg/kg | |
| | General population | Oral | 0.17 mg/kg | |
| | General population | Inhalation | 2.5 mg/m ³ | |
| | Workers | Dermal | 166 mg/kg | |
| | General population | Inhalation | 0.86 mg/m ³ | Repeated dose toxicity |
| | General population | Dermal | 100 mg/kg | |
| | Workers | Inhalation | 3.5 mg/m ³ | Repeated dose toxicity |
| | General population | Oral | 100 mg/kg | |
| | Workers | Inhalation | 5.8 mg/m ³ | |

| | | | | |
|----------------------|--------------------|------------|------------------------|------------------------|
| | General population | Dermal | 5 mg/kg | |
| Phenol, 4-methoxy- | Workers | Inhalation | 10 mg/m ³ | Acute toxicity |
| | Workers | Inhalation | 3 mg/m ³ | Repeated dose toxicity |
| Cetrimonium chloride | General population | Inhalation | 0.98 mg/m ³ | Repeated dose toxicity |
| | Workers | Dermal | 4.7 mg/kg | Repeated dose toxicity |
| | Workers | Inhalation | 3.32 mg/m ³ | Repeated dose toxicity |

PNEC-Values

| Critical component | Environmental compartment | | Remarks |
|--|------------------------------|---------------|---------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | soil | 0.0013 mg/kg | |
| | Sewage treatment plant | 100 mg/l | |
| | Aquatic (marine water) | 0.00034 mg/l | |
| | Aquatic (intermit. releases) | 0.034 mg/l | |
| | freshwater sediment | 0.00884 mg/kg | |
| | Aquatic (freshwater) | 0.0034 mg/l | |
| ethoxylated trimethylolpropane triacrylate | Aquatic (marine water) | 0.000195 mg/l | |
| | Aquatic (intermit. releases) | 0.0195 mg/l | |
| | Aquatic (freshwater) | 0.00195 mg/l | |
| | Sewage treatment plant | 10 mg/l | |
| | soil | 0.00587 mg/kg | |
| | Marine sediments | 0.00082 mg/kg | |
| | Predator | 5.6 mg/kg | |
| | freshwater sediment | 0.0082 mg/kg | |
| Isodecyl acrylate | freshwater sediment | 0.904 mg/kg | |
| | Marine sediments | 0.0904 mg/kg | |
| | Aquatic (intermit. releases) | 13 µg/l | |
| | Sewage treatment plant | 2.3 mg/l | |
| | Aquatic (marine water) | 0.13 µg/l | |
| | soil | 0.18 mg/kg | |
| | Aquatic (freshwater) | 1.3 µg/l | |
| Trimethylolpropane triacrylate | Marine sediments | 0.00062 mg/kg | |
| | Sewage treatment plant | 6.25 mg/l | |
| | Aquatic (freshwater) | 0.00147 mg/l | |
| | freshwater sediment | 0.0062 mg/kg | |
| | soil | 0.0043 mg/kg | |
| | Aquatic (marine water) | 0.000147 mg/l | |
| | Predator | 5.6 mg/kg | |
| | Aquatic (intermit. releases) | 0.0147 mg/l | |

| | | | |
|---|------------------------------|---------------|--|
| blue organic pigment | soil | 1 mg/kg | |
| | freshwater sediment | 10 mg/kg | |
| | Marine sediments | 1 mg/kg | |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | Aquatic (marine water) | 0.0041 mg/l | |
| | Aquatic (freshwater) | 0.1 mg/l | |
| | soil | 1.04 mg/kg | |
| | Predator | 8.33 mg/kg | |
| | Aquatic (marine water) | 0.01 mg/l | |
| | Predator | 16.7 mg/kg | |
| | Aquatic (intermit. releases) | 1 mg/l | |
| | Marine sediments | 0.731 mg/kg | |
| | Sewage treatment plant | 10 mg/l | |
| | Sewage treatment plant | 100 mg/l | |
| | freshwater sediment | 0.731 mg/kg | |
| | Sewage treatment plant | 0.17 mg/l | |
| | freshwater sediment | 1.29 mg/kg | |
| | soil | 0.35 mg/kg | |
| | Aquatic (freshwater) | 0.0041 mg/l | |
| Phenol, 4-methoxy- | freshwater sediment | 0.125 mg/kg | |
| | Aquatic (freshwater) | 0.0136 mg/l | |
| | Aquatic (marine water) | 0.00136 mg/l | |
| | Sewage treatment plant | 10 mg/l | |
| | soil | 0.017 mg/kg | |
| | Marine sediments | 0.0125 mg/kg | |
| Cetrimonium chloride | soil | 7 mg/kg | |
| | Aquatic (intermit. releases) | 0.0008 mg/l | |
| | Sewage treatment plant | 0.4 mg/l | |
| | Aquatic (marine water) | 0.000068 mg/l | |
| | freshwater sediment | 9.27 mg/kg | |
| | Aquatic (freshwater) | 0.00068 mg/l | |
| | Marine sediments | 0.927 mg/kg | |

8.2 Exposure controls

Appropriate Engineering Controls: Provide adequate ventilation.

Controls:

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. Follow training instructions when handling this material.

Eye/face protection: Safety goggles. EN 166.

Skin protection

Hand Protection: Protective gloves should be used if there is a risk of direct contact or splash.(EN374) Chemical resistant gloves required for prolonged or repeated contact. Butyl rubber. Glove thickness: > 0.70 mm Break-through time: > 480 min Risk of splashes: Nitrile rubber. Nitrile gloves are recommended, but be aware that the liquid may penetrate the gloves. Frequent change is advisable. The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material.

Other: Safety clothes : long sleeved clothing EN13688

Respiratory Protection: In case of inadequate ventilation use suitable respirator (EN14387). Seek advice from local supervisor.

Hygiene measures: Do not handle until all safety precautions have been read and understood. Obtain special instructions before use. Contaminated work clothing should not be allowed out of the workplace. Avoid contact with skin. Observe good industrial hygiene practices.

Environmental Controls: Do not empty into drains.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

| | |
|--|--------------------|
| Physical state: | liquid |
| Form: | liquid |
| Color: | Blue-green |
| Odor: | Sweetish |
| Odor Threshold: | No data available. |
| pH: | No data available. |
| Freezing point: | < 0 °C |
| Boiling Point: | > 100 °C |
| Flash Point: | > 93.33 °C |
| Evaporation Rate: | No data available. |
| Flammability (solid, gas): | No data available. |
| Flammability Limit - Upper (%): | No data available. |
| Flammability Limit - Lower (%): | No data available. |
| Vapor pressure: | No data available. |
| Vapor density (air=1): | No data available. |
| Relative density: | 1.04 |

Solubility(ies)

| | |
|---|--------------------|
| Solubility in Water: | No data available. |
| Solubility (other): | No data available. |
| Partition coefficient (n-octanol/water): | No data available. |
| Autoignition Temperature: | No data available. |
| Decomposition Temperature: | No data available. |
| Viscosity: | No data available. |
| Explosive properties: | No data available. |
| Oxidizing properties: | No data available. |

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1 Reactivity: | Material is stable under normal conditions. |
| 10.2 Chemical Stability: | No data available. |
| 10.3 Possibility of hazardous reactions: | Not known. |
| 10.4 Conditions to avoid: | Avoid heat or contamination. |
| 10.5 Incompatible Materials: | None known. |
| 10.6 Hazardous Decomposition Products: | By heating and fire, harmful vapors/gases may be formed. |

SECTION 11: Toxicological information**Information on likely routes of exposure**

| | |
|----------------------|--|
| Inhalation: | Inhalation is the primary route of exposure. In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. |
| Skin Contact: | May cause an allergic skin reaction. |
| Eye contact: | Eye contact is possible and should be avoided. |

11.1 Information on toxicological effects**Acute toxicity****Oral**

Product: ATEmix: 39,680 mg/kg

Specified substance(s)

Oxybis(methyl-2,1-ethanediyl) diacrylate LD 50 (Rat): 4,626 mg/kg

ethoxylated LD 50 (Rat): > 2,000 mg/kg

trimethylolpropane

triacrylate

| | |
|--|----------------------------|
| Isodecyl acrylate | LD 50 (Rat): 4,435 mg/kg |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | LD 50 (Rat): 1,984 mg/kg |
| Trimethylolpropane triacrylate | LD 50 (Rat): > 5,000 mg/kg |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | LD 50 (Rat): > 6,000 mg/kg |
| Cetrimonium chloride | LD 50 (Rat): 861 mg/kg |

Dermal

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

| | |
|--|--------------------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | LD 50 (Rabbit): > 2,000 mg/kg |
| ethoxylated trimethylolpropane triacrylate | LD 50 (Rabbit): > 13,200 mg/kg |
| Isodecyl acrylate | LD 50 (Rabbit): 7,522 mg/kg |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | LD 50: > 2,000 mg/kg |
| Trimethylolpropane triacrylate | LD 50: > 2,000 mg/kg |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | LD 50 (Rat): > 2,000 mg/kg |
| Cetrimonium chloride | LD 50 (Rabbit): 1,900 mg/kg |

Inhalation

Product: Not classified for acute toxicity based on available data.

Specified substance(s)

| | |
|--|-------------------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | No data available. |
| ethoxylated trimethylolpropane triacrylate | No data available. |
| Isodecyl acrylate | LC 50 (Rat, 8 h): > 1.19 mg/l |
| 2-methyl-1-(4-methylthiophenyl)-2- | No data available. |

morpholinopropan-1-one
 Timethylopropane triacrylate LC 50 (Rat, 6 h): > 0.55 mg/l
 2,6-bis(1,1-dimethylethyl)-4-methylphenol No data available.
 Cetrimonium chloride No data available.

Repeated dose toxicity

Product: No data available.

Specified substance(s)

Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated NOAEL (Rat(Female, Male), Oral, 28 - 52 d): 250 mg/kg
 trimethylopropane triacrylate NOAEL (Rat(Female, Male), Oral, 28 - 52 d): 250 mg/kg
 NOAEL (Mouse, Rat(Female, Male), Dermal, 16 d): >= 200 mg/kg
 Isodecyl acrylate NOAEL (Mouse, Rat(Female, Male), Dermal, 16 d): 25 mg/kg
 NOAEL (Rat(Female, Male), Inhalation): 0.226 mg/l
 NOAEL (Rat(Female, Male), Inhalation): 0.075 mg/l
 LOAEL (Rat(Female, Male), Inhalation): 0.226 mg/l
 LOAEL (Rat(Female, Male), Inhalation): 0.753 mg/l
 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one NOAEL (Rat, Oral, 90 d): 10 mg/kg
 NOAEL (Rat, Oral, 90 d): 75 mg/kg
 Timethylopropane triacrylate NOAEL (Rat(Female, Male), Oral, 28 - 52 d): 250 mg/kg
 NOAEL (Rat(Female, Male), Oral, 35 - 56 d): >= 500 mg/kg
 2,6-bis(1,1-dimethylethyl)-4-methylphenol NOAEL (Rat(Male), Oral, 1.25 - 22.75 Months): 25 mg/kg
 Cetrimonium chloride NOAEL (Rat(Female, Male), Oral, 90 d): 113 mg/kg
 NOAEL (Rat(Female, Male), Oral, 90 d): 22 mg/kg
 NOAEL (Rabbit(Female, Male), Dermal, 6.5 - 7 h): 10 mg/kg
 NOAEL (Rat(Female, Male), Oral, 28 d): 300 mg/kg

Skin Corrosion/Irritation:

Product: Causes skin irritation.

Specified substance(s)

Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated in vivo (Rabbit): Category 2
 trimethylopropane triacrylate in vivo (Rabbit): Not irritating
 Isodecyl acrylate No data available.
 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one No data available.
 Timethylopropane triacrylate in vivo (Rabbit): Slightly irritating

| | |
|--|----------------------------------|
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | in vivo (Rabbit): Not irritating |
| Cetrimonium chloride | Irritating |

Serious Eye Damage/Eye Irritation:

Product: Causes serious eye damage.

Specified substance(s)

| | |
|---|--|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylolpropane triacrylate | in vivo (Rabbit, 24 - 72 hrs): Category 1 OECD GHS |
| Isodecyl acrylate | in vivo (Rabbit, 24 - 72 hrs): Irritating |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | Mildly Irritating |
| Timethylolpropane triacrylate | in vivo (24 - 72 hrs): Not an irritant EU |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | in vivo (Rabbit, 24 hrs): Moderately irritating |
| Cetrimonium chloride | in vivo (Rabbit, 24 - 72 hrs): Not irritating EU |
| | Irritating |

Respiratory or Skin Sensitization:

Product: May cause an allergic skin reaction.

Specified substance(s)

| | |
|---|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylolpropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | No data available. |
| Cetrimonium chloride | No data available. |

Germ Cell Mutagenicity

In vitro**Product:** No data available.**Specified substance(s)**

Oxybis(methyl-2,1-

ethanediyl) diacrylate

No data available.

ethoxylated

No data available.

trimethylolpropane

triacrylate

Isodecyl acrylate

No data available.

2-methyl-1-(4-

methylthiophenyl)-2-

morpholinopropan-1-one

No data available.

Timethylolpropane

triacrylate

No data available

2,6-bis(1,1-

dimethylethyl)-4-methyl-

phenol

No data available.

Cetrimonium chloride

No data available.

In vivo**Product:** No data available.**Specified substance(s)**

Oxybis(methyl-2,1-

ethanediyl) diacrylate

No data available.

ethoxylated

No data available.

trimethylolpropane

triacrylate

Isodecyl acrylate

No data available.

2-methyl-1-(4-

methylthiophenyl)-2-

morpholinopropan-1-one

No data available.

Timethylolpropane

triacrylate

No data available

2,6-bis(1,1-

dimethylethyl)-4-methyl-

phenol

No data available.

Cetrimonium chloride

No data available.

Carcinogenicity**Product:** No data available.**Specified substance(s)**

Oxybis(methyl-2,1-

ethanediyl) diacrylate

No data available.

ethoxylated

No data available.

trimethylolpropane

triacrylate

Isodecyl acrylate

No data available.

| | |
|--|--------------------|
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Reproductive toxicity

Product: May damage fertility or the unborn child.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Specific Target Organ Toxicity - Repeated Exposure

| | |
|--|---------------------------|
| Product: | No data available. |
| Specified substance(s) | |
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylolpropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane triacrylate | No information available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Aspiration Hazard

| | |
|--|--------------------|
| Product: | No data available. |
| Specified substance(s) | |
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylolpropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

SECTION 12: Ecological information

General information: Contains a substance which causes risk of hazardous effects to the environment.

12.1 Toxicity

Acute toxicity

Fish

Product: No data available.

Specified substance(s)

| | |
|---|--|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylolpropane triacrylate | LC 50 (Leuciscus idus, 96 h): 2.2 - 4.64 mg/l (Static) experimental result |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | LC 50 (Danio rerio, 96 h): 1.95 mg/l (Static) experimental result |
| Timethylolpropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | LC 50 (Danio rerio, 96 h): 9 mg/l (semi-static) experimental result |
| Cetrimonium chloride | LC 50 (Leuciscus idus, 96 h): 1.47 mg/l (Static) experimental result |
| | LC 50 (Danio rerio, 96 h): > 100 mg/l (Static) experimental result |
| | No data available. |

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

| | |
|---|---|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylolpropane triacrylate | EC 50 (48 h): 22.3 mg/l (Static) experimental result |
| Isodecyl acrylate | EC 50 (48 h): 70.7 mg/l (Static) experimental result |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane triacrylate | EC 50 (24 h): 15.3 mg/l (semi-static) experimental result |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | LC 50 (48 h): 19.9 mg/l (Static) experimental result |
| Cetrimonium chloride | EC 50 (48 h): 0.48 mg/l (Static) experimental result |
| | No data available. |

Chronic Toxicity

Fish

Product: No data available.

Specified substance(s)

| | |
|---|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylolpropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| | No data available. |
| | No data available. |

| | |
|--|--------------------|
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Aquatic Invertebrates

Product: No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

Toxicity to Aquatic Plants

Product: No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated | No data available. |
| trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

12.2 Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | No data available. |
| ethoxylated | No data available. |
| trimethylolpropane | |
| triacrylate | |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane | No data available. |
| triacrylate | |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

BOD/COD Ratio

Product No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | No data available. |
| ethoxylated | No data available. |
| trimethylolpropane | |
| triacrylate | |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylolpropane | No data available. |
| triacrylate | |
| 2,6-bis(1,1-dimethylethyl)-4-methylphenol | No data available. |
| Cetrimonium chloride | No data available. |

12.3 Bioaccumulative potential

Product: No data available.

Specified substance(s)

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate | No data available. |
| ethoxylated | No data available. |
| trimethylolpropane | |
| triacrylate | |
| Isodecyl acrylate | No data available. |

| | |
|--|--------------------|
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | No data available. |
| Cetrimonium chloride | No data available. |

12.4 Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | No data available. |
| Cetrimonium chloride | No data available. |

12.5 Results of PBT and vPvB assessment: Not fulfilling PBT (persistent/bioaccumulative/toxic) criteria Not fulfilling vPvB (very persistent/very bioaccumulative) criteria

| | |
|--|--------------------|
| Oxybis(methyl-2,1-ethanediyl) diacrylate ethoxylated trimethylopropane triacrylate | No data available. |
| Isodecyl acrylate | No data available. |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | No data available. |
| Timethylopropane triacrylate | No data available. |
| 2,6-bis(1,1-dimethylethyl)-4-methyl-phenol | No data available. |
| Cetrimonium chloride | No data available. |

12.6 Other adverse effects: Harmful to aquatic life with long lasting effects.

| |
|--|
| SECTION 13: Disposal considerations |
|--|

13.1 Waste treatment methods

General information: Disposal considerations (including disposal of contaminated containers or packaging) Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal.

Disposal methods: Discharge, treatment, or disposal may be subject to national, state, or local laws.

Since emptied containers retain product residue, follow label warnings even after container is emptied.

SECTION 14: Transport information

ADR

| | |
|------------------------------------|----------------|
| 14.1 UN Number: | Not regulated. |
| 14.2 UN Proper Shipping Name: | Not regulated. |
| 14.3 Transport Hazard Class(es) | Not regulated. |
| 14.4 Packing Group: | Not regulated. |
| 14.5 Environmental Hazards: | Not regulated. |
| 14.6 Special precautions for user: | Not regulated. |

RID

| | |
|------------------------------------|----------------|
| 14.1 UN Number: | Not regulated. |
| 14.2 UN Proper Shipping Name: | Not regulated. |
| 14.3 Transport Hazard Class(es) | Not regulated. |
| 14.4 Packing Group: | Not regulated. |
| 14.5 Environmental Hazards: | Not regulated. |
| 14.6 Special precautions for user: | Not regulated. |

IMDG

| | |
|------------------------------------|----------------|
| 14.1 UN Number: | Not regulated. |
| 14.2 UN Proper Shipping Name: | Not regulated. |
| 14.3 Transport Hazard Class(es) | Not regulated. |
| 14.4 Packing Group: | Not regulated. |
| 14.5 Environmental Hazards: | Not regulated. |
| 14.6 Special precautions for user: | Not regulated. |

IATA

| | |
|------------------------------------|----------------|
| 14.1 UN Number: | Not regulated. |
| 14.2 UN Proper Shipping Name: | Not regulated. |
| 14.3 Transport Hazard Class(es) | Not regulated. |
| 14.4 Packing Group: | Not regulated. |
| 14.5 Environmental Hazards: | Not regulated. |
| 14.6 Special precautions for user: | Not regulated. |

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: not applicable.

SECTION 15: Regulatory information

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

SDS_GB - 000001016277

21/23

EU Regulations

Regulation (EC) No. 2037/2000 Substances that deplete the ozone layer: none

Regulation (EC) No. 850/2004 on persistent organic pollutants: none

Regulation (EC) No. 689/2008 Import and export of dangerous chemicals: none

Regulation (EC) No. 1907/2006, REACH Annex XIV Substances subject to authorisation, as amended:
 none

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:
 none

Directive 2004/37/EC on the protection of workers from the risks related to exposure to carcinogens and mutagens at work.: none

Directive 92/85/EEC: on the safety and health of pregnant workers and workers who have recently given birth or are breast feeding.: none

Directive 96/82/EC (Seveso III): on the control of major accident hazards involving dangerous substances:

| Chemical name | CAS-No. | Concentration |
|--|------------|---------------|
| Isodecyl acrylate | 1330-61-6 | 10 - 20% |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 | 1.0 - 10% |

EU. Regulation No. 166/2006 PRTR (Pollutant Release and Transfer Registry), Annex II: Pollutants:

| Chemical name | CAS-No. | Concentration |
|----------------------|----------|---------------|
| blue organic pigment | 147-14-8 | 0.1 - 1.0% |

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

| Chemical name | CAS-No. | Concentration |
|--|------------|---------------|
| Isodecyl acrylate | 1330-61-6 | 10 - 20% |
| Trimethylolpropane triacrylate | 15625-89-5 | 1.0 - 10% |
| 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 | 1.0 - 10% |
| Phenol, 4-methoxy- | 150-76-5 | 0 - <0.1% |

15.2 Chemical safety assessment:

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Revision Information:

Not relevant. Not relevant.

Key literature references and sources for data: Safety Data Sheet from the supplier.
ECHA

Wording of the H-statements in section 2 and 3

| | |
|--------|---|
| H302 | Harmful if swallowed. |
| H311 | Toxic in contact with skin. |
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation. |
| H316 | Causes mild skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H318 | Causes serious eye damage. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H360FD | May damage fertility. May damage the unborn child. |
| 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. |

Training information: No data available.

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

Skin Irrit. 2, H315
Eye Dam. 1, H318
Skin Sens. 1, H317
Repr. 1B, H360FD
STOT SE 3, H335
Aquatic Chronic 3, H412

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SDS No.:

Disclaimer: This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.