# Material Safety Data Sheet

**Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - Europe**

**Version : 01** **Date of issue: 27.04.2023**
**Date of revision: -**

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

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| **1.1. Product identifier** | |
| | **Kinetics Primer**<br>**KPR01** |
| **1.2. Relevant identified uses of the substance or mixture and uses advised against** | |
| Identified uses | Cosmetic. |
| Uses advised against | Manufacture of food products. |
| **1.3. Details of the supplier of the safety data sheet** | |
| Responsible person: | **Kinetics Nail Systems, Ltd**<br>3K Kurzemes pr., Riga, Latvia, LV-1067, Latvia<br>TEL: +(371) 20436655<br>FAX: +(371) 6 7873 525<br>e-mail: info@kineticsbeauty.com<br>web: www.kineticsbeauty.com<br>E-mail of person responsible for Product Safety Data Sheet:<br>info@kineticsbeauty.com |
| **1.4. Emergency telephone number** | |
| | EU:112<br>Emergency telephone for other regions to be filled out by local business |

## SECTION 2: Hazards identification

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| **2.1. Classification of the substance or mixture** | |
| According to regulation (EC) No 1272/2008: | **Acute Tox. 4, H302**<br>**Acute Tox. 4, H312**<br>**Skin Corr. 1A, H314**<br>**Eye Dam. 1, H318**<br>**STOT SE 3, H335** |
| Important adverse physicochemical, human health and environmental effects: | **Acute Tox. 4, Acute toxicity (oral), Hazard Category 4;**<br>**H302 Harmful if swallowed.**<br>**Acute Tox. 4, Acute toxicity (dermal), Hazard Category 4;**<br>**H312 Harmful in contact with skin.**<br>**Skin Corr. 1A, Skin corrosion/ irritation, Hazard Category 1A;**<br>**H314 Causes severe skin burns and eye damage.**<br>**Eye Dam. 1, Serious eye damage/eye irritation, Hazard Category 1;**<br>**H318 Causes serious eye damage.**<br>**STOT SE 3, Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract irritation;**<br>**H335 May cause respiratory irritation.** |
| **2.2. Label elements** | |
| According to regulation (EC) No 1272/2008: |  <br>**Danger**<br>**H302 Harmful if swallowed.**<br>**H312 Harmful in contact with skin.**<br>**H314 Causes severe skin burns and eye damage.**<br>**H318 Causes serious eye damage.**<br>**H335 May cause respiratory irritation.** |

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| | Contain: METHACRYLIC ACID; ETHYLENE PHOSPHITE.<br><br>P101 If medical advice is needed, have product container or label at hand.<br>P102 Keep out of reach of children.<br>P103 Read carefully and follow all instructions.<br>P233 Keep container tightly closed.<br>P260 Do not breathe mist/vapours/spray.<br>P264 Wash hands/ affected body parts thoroughly after handling.<br>P270 Do not eat, drink or smoke when using this product.<br>P271 Use only outdoors or in a well-ventilated area.<br>P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.<br>P330 Rinse mouth.<br>P312 Call a POISON CENTRE/doctor, if you feel unwell.<br>P302+P352 IF ON SKIN: Wash with plenty of water/ soap.<br>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].<br>P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.<br>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>P310 Immediately call a POISON CENTER or doctor/physician.<br>P361+P364 Take off immediately all contaminated clothing and wash it before reuse.<br>P403+P233 Store in a well-ventilated place. Keep container tightly closed.<br>P405 Store locked up.<br>P501 Dispose of contents/container to in accordance with local/ regional/ national/ international regulation. |
| **2.3. Other hazards** | |
| | Product does not meet the criteria for PBT or vPvB in accordance with Annex XIII of REACH (Regulation (EC) No 1907/2006). |
| **See section 11 for more detailed information on health effects and symptoms.** | |

## SECTION 3: Composition/information on ingredients

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| **3.1. Substances** | No relevant. |
| **3.2. Mixtures** | |

| Ingredient name (INCI) | INDEX Number: | CAS Number: | EINECS/ EC Number: | Conc. (%) | Classification Regulation (EC) 1272/2008 (CLP) | Type |
|---|---|---|---|---|---|---|
| Methacrylic acid<br>2-methylpropenoic acid<br>[METHACRYLIC ACID] | 607-088-00-5 | 79-41-4 | 201-204-4 | 75-80% | Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1A, H314<br>*Specific concentration limits:*<br>STOT SE 3; H335: C ≥ 1 % | [1] [2] |
| Ethylene phosphite<br>[ETHYLENE PHOSPHITE] | N/A | 1003-11-8 | 621-992-7 | 5-10 | Acute Tox. 4, H302<br>Skin Irrit. 2, H315<br>Eye Irrit. 2, H319<br>STOT SE 3, H335 | [1] |
| n-Butyl acetate<br>[BUTYL ACETATE] | 607-025-00-1 | 123-86-4 | 204-658-1 | 5-10 | Flam. Liq. 3, H226<br>STOT SE 3, H336<br>EUH066 | [1] [2] [5] |

**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 and hence require reporting in this section.**
**See section 16 for the full text of the R and H phrases declared above.**
**Occupational exposure limits, if available, are listed in section 8.**
[1] Substance classified with a health or environmental hazard
[2] Substance with a workplace exposure limit
[3] PBT-substance
[4] vPvB-substance
[5] SEVESO substance.

## SECTION 4: First aid measures

| **4.1. Description of first aid measures** | |
|---|---|
| General advice: | Remove contaminated clothing. |
| Inhalation: | Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Get medical attention if adverse health effects persist or are severe. If necessary, call a poison centre or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. |
| Skin contact: | Immediately get medical attention. Immediately 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 15 minutes. Wash clothing before reuse. Clean shoes thoroughly before reuse. |
| Eye contact: | Immediately call ambulance (cue: caustic burn of the eyes). Immediately flush eyes with plenty of water, keeping the eyelids apart. Check for and remove any contact lenses. Continue rinsing eye until arrival at ophthalmic hospital. |
| Ingestion: | Immediately get medical attention. Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. |
| **4.2. Most important symptoms and effects, both acute and delayed** | |
| Eye contact: | Corrosive to the eyes.<br>Adverse health effects might include the following symptoms: Conjunctivitis, lacrimation, redness and swelling of eyes, pain, blurred vision, blindness. |
| Inhalation: | May cause nose and throat irritation. Harmful if inhaled.<br>Adverse health effects might include the following symptoms: Fatigue, cough, irritation, pain, unconsciousness. |
| Skin contact: | Corrosive and harmful (toxic) to the skin.<br>Adverse health effects might include the following symptoms: Pain, swelling and redness of skin, dermatitis, blistering, necrosis, nausea, vomiting and diarrhoea could develop. |
| Ingestion: | Corrosive and harmful (toxic) if ingested.<br>Adverse health effects might include the following symptoms: Nausea, vomiting, abdominal pain, and diarrhoea could develop. Abdominal pain. Burns to the mouth and digestive tract (esophagus). Bleeding from gastrointestinal tract. |
| **4.3. Indication of any immediate medical attention and special treatment needed** | |
| Specific treatments: | Treat symptomatically. |

**See section 11 for more detailed information on health effects and symptoms.**

## SECTION 5: Firefighting measures

| **5.1. Extinguishing media** | |
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| Suitable extinguishing media: | Foam, dry chemical, carbon dioxide. |
| Unsuitable extinguishing media: | Full-power water jet. |
| **5.2. Special hazards arising from the substance or mixture** | |
| | Hazards from the substance or mixture: In a fire or if heated, a pressure increase will occur and the container may burst.<br>Hazardous combustion products: Decomposition products may include the following materials:<br>carbon dioxide<br>carbon monoxide<br>Phosphorous oxides<br>Other unidentified organic and inorganic substances.<br>Fire water contaminated with this material must be contained and prevented from being discharged to any waterways, sewer or drain. |
| **5.3. Advice for firefighters** | |
| | Keep away from heat/sparks/open flames/hot surfaces. 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.<br>If water is used to cool closed containers to prevent pressure build-up, fog nozzles are preferred. |

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| | Full protective equipment, including self-contained breathing apparatus is needed to protect fire-fighters from exposure to coating's hazardous ingredients and hazardous decomposition products. During emergency conditions, overexposure to decomposition products may cause a health hazard; symptoms may not be immediately apparent. Obtain medical attention. |

## SECTION 6: Accidental release measures

| **6.1. Personal precautions, protective equipment and emergency procedures** | |
|---|---|
| | Personal precautions, protective equipment and emergency procedures<br>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. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.<br>For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section "Exposure controls/personal protection" on suitable and unsuitable materials. See also the information in "For non-emergency personnel". Wear protective gloves/protective clothing/eye protection/face protection. Keep away sources of ignition. Use breathing apparatus if exposed to vapours/dust/mist/aerosol. Do not breathe vapours or spray mist. |
| **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). |
| **6.3. Methods and material for containment and cleaning up** | |
| Small spill: | Stop leak if without risk. Move containers from spill area. 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. 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.<br>See Section 8 for information on appropriate personal protective equipment.<br>See Section 13 for additional waste treatment information. |

## SECTION 7: Handling and storage

| **7.1. Precautions for safe handling** | |
|---|---|
| Protective measures: | Put on appropriate personal protective equipment (see Section "Exposure controls/ personal protection"). Absolutely avoid contact with the eyes and/or skin. Do not ingest. Avoid breathing vapour or mist. Keep away from heat/sparks/open flames/hot surfaces. 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), ignitible mixtures may form in air. Keep container tightly closed. Provide good room ventilation even at ground level (vapours are heavier than air). NEVER use steam or electric heating bands.<br>Avoid release to the environment. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container. |
| Advice on general occupational hygiene: | Good industrial hygiene practices should be observed.<br>Provide sufficient air exchange and/or exhaust in work rooms.<br>Wash hands before work breaks and after finishing work.<br>Safety shower and eye wash fountain should be available.<br>Do not eat, drink or smoke during use. Take off all contaminated clothing immediately.<br>Use of dispensing equipment is recommended to minimise the risk of skin or eye contact.<br>See also Section 8 for additional information on hygiene measures. |
| **7.2. Conditions for safe storage, including any incompatibilities** | |
| Storage: | 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. Maintain the temperature of the between 18°C and approx. 35°C. The ideal storage temperature is |

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| | 20-25°C. Can polymerize with intense heat release. Higher temperature such as 40° C can be safely tolerated for short times such as during tranportation or inventory turnover.<br>Store in well-ventilated area. Keep containers (solvent resistant) closed when not in use. Store away from ignition sources. Store in a clean, dry area. Store in accordance with local regulations. 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. 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. Empty container may retain product residues (vapour or liquid). |
| **7.3. Specific end use(s)** | |
| Industrial sector specific solutions: | Product is for professional use only. |

## SECTION 8: Exposure controls/personal protection

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| **8.1 Control parameters** | |
| Occupational exposure limits: | Limit values are laid down throughout the EU, but each Member State establishes its own national OELs, often going beyond EU legislation. OELs are set by competent national authorities and other relevant institutions.<br>**United Kingdom (EH40):**<br>*Methacrylic acid:*<br>Long-term exposure limit, 8-hr TWA reference period: 20 ppm; 72 mg/m³.<br>Short-term exposure limit, 15 minute TWA reference period: 40 ppm; 143 mg/m³.<br>*n-Butyl acetate:*<br>Long-term exposure limit, 8-hr TWA reference period: 150 ppm; 724 mg/m³.<br>Short-term exposure limit, 15 minute TWA reference period: 200 ppm; 966 mg/m³.<br><br>**Germany (EH40):**<br>*n-Butyl acetate:*<br>Long-term exposure limit, 8-hr TWA reference period: 60 ppm; 300 mg/m³.<br><br>**Latvia (AER, reg.325/2011):**<br>*Methacrylic acid:*<br>Long-term exposure limit, 8-hr AER reference period: 10 mg/m³.<br>*n-Butyl acetate:*<br>Long-term exposure limit, 8-hr TWA reference period: 50 ppm; 241 mg/m³.<br>Short-term exposure limit, 15 minute TWA reference period: 150 ppm; 723 mg/m³. |
| Recommended monitoring Procedures: | If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances. |
| **8.2. Exposure controls** | |
| Appropriate engineering Controls: | Ensure good ventilation/extraction. |
| **Individual protection measures, such as personal protective equipment:** | |
| Hygiene measures: | Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.<br>Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. |
| Respiratory protection |  Ensure adequate ventilation.<br>An approved mask or respirator fitted with an organic vapour cartridge should be worn in case of high concentrations.<br>Filter type: ABEK |

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| Eye/face protection: |  Safety glasses with sideshields or chemical safety goggles should be worn when working with product. |
| Skin protection: | *Hand Protection:*<br>  Chemical-resistant protective gloves (EN 374).<br>Suitable glove material(-s):<br>Material: Butyl rubber.<br>Break-through time: 480 min<br>Glove thickness: 0.3 mm<br>Guideline: EN 374<br>This information is based on literature references and on information provided by glove manufacturers, or is derived by analogy with similar substances. Please note that in practice the working life of chemical-resistant protective gloves may be considerably shorter than the permeation time determined in accordance with EN 374 as a result of the many influencing factors (e.g. temperature). If signs of wear and tear are noticed, then the gloves should be replaced.<br>Wear suitable protective clothing.<br><br>*Skin and Body Protection:*<br>On handling of larger quantities: face mask, chemical-resistant boots and apron. |
| **Environmental exposure controls:** | |
| | According to available technology. |

## SECTION 9: Physical and chemical properties

| **9.1. Information on basic physical and chemical properties** | |
|---|---|
| Physical state | Transparent liquid. |
| Colour | Data not available. |
| Odour | Data not available. |
| Melting point/freezing point | Methacrylic acid: 15.5 °C |
| Initial boiling point and boiling range | Methacrylic acid: 162 °C at 1013.25 hPa |
| Flammability (solid, gas) | Not applicable**.** |
| Lower and upper explosion limit | Data not available. |
| Flash point | Methacrylic acid: 68 °C (Pensky-Martens closed cup) |
| Auto-ignition temperature | Data not available. |
| Decomposition temperature | Data not available. |
| pH | Data not available. |
| Kinematic viscosity | Data not available. |
| Solubility(ies) | Methacrylic acid:<br>Water solubility: 98 g/l |
| Partition coefficient n-octanol/ water (log value) | Methacrylic acid:<br>log Pow: 0.93 |
| Vapour pressure | Methacrylic acid: 0.97 hPa at 20 °C |
| Density and/or relative density | Methacrylic acid:<br>Density: 1.01 g/cm³ at 20 °C |
| Relative vapour density | Data not available. |
| Particle characteristics | Only apply to solids. |
| **9.2. Other information** | |
| Impurity | Data not available. |
| Dynamic viscosity | Methacrylic acid:<br>1.38 mPas at 25 °C |
| Flammable liquid | n-Butyl acetate - Category 3 Flammable liquid:<br>Flash point (EU A.9, GLP): 27 °C<br>Boling point (OECD 103): 126.2°C |

## SECTION 10: Stability and reactivity

| **10.1. Reactivity** | |
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| | No hazardous reactions if stored and handled as prescribed/indicated. |

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| **10.2. Chemical stability** | |
| | No decomposition if used as directed. |
| **10.3. 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. Product reacts violently to explosively with alkali metals, alkaline earth metals, various metal powders, strong alkalis and ammonia. Reactions with alkalis. Reacts vigorously with water producing heat. Contact with metals and water liberates hydrogen. Reactions with organic substances. |
| **10.4. Conditions to avoid** | |
| | 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.<br>Sun-Light, un-clean conditions to avoid during storage. Heat. |
| **10.5. Incompatible materials** | |
| | Reactions with strong oxidizing agents, bases. |
| **10.6. Hazardous decomposition products** | |
| | Fumes produced when heated to decomposition may include: Toxic carbon monoxide, carbon dioxide. |

## SECTION 11: Toxicological information

| **11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008** | | | | |
|---|---|---|---|---|
| **Acute toxicity:** | **Acute Tox. 4, H302 Harmful if swallowed.**<br>**Acute Tox. 4, H312 Harmful in contact with skin.** | | | |
| **Mixture/ Ingredient name** | **Result** | **Species** | **Dose** | **Exposure** |
| **Raw Primer acid** | **ATE Oral** | **-** | **1 240 mg/kg bw** | **-** |
| | **ATE Dermal** | **-** | **1 375 mg/kg bw** | **-** |
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | LD50 Oral | Rat | 1 320 mg/kg bw | - |
| | ATE Dermal | - | 1 100 mg/kg bw | - |
| Ethylene phosphite<br>[ETHYLENE PHOSPHITE] | ATE Oral | - | 500 mg/kg bw | - |
| n-Butyl acetate<br>[BUTYL ACETATE] | LD50 Oral | Rat - female | 12.2 mL/kg bw<br>(calculated 10760 mg/kg) | - |
| | | Rat - male | 14.5 mL/kg<br>(calculated 12789 mg/kg) | - |
| | LD50 Dermal | Rabbit | 16 mL/kg bw<br>(calculated 14112 mg/kg) | - |
| **Eye irritation:** | **Eye Dam. 1, H318 Causes serious eye damage.** | | | |
| **Mixture/ Ingredient name** | **Effect** | | | |
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | Classification: Category 1A highly corrosive (irreversible effects on the eye).<br>Species: Rabbit.<br>Amount / concentration applied: 0.1 mL.<br>Duration of treatment/ exposure: Single application.<br>Guideline: Draize | | | |
| Ethylene phosphite<br>[ETHYLENE PHOSPHITE] | Irritating. | | | |
| **Skin irritation/ corrosion:** | **Skin Corr. 1A, H314 Causes severe skin burns and eye damage.** | | | |
| **Mixture/ Ingredient name** | **Effect** | | | |
| Methacrylic acid<br>2-methylpropenoic acid<br>[METHACRYLIC ACID] | Classification: Category 1A highly corrosive (causes severe burns).<br>Species: Rabbit.<br>Amount / concentration applied: 0.5 mL.<br>Duration of treatment / exposure: 4 hrs, 1 hr or 3 minutes.<br>Guideline: OECD Guideline 404 (Acute Dermal Irritation / Corrosion). | | | |
| Ethylene phosphite<br>[ETHYLENE PHOSPHITE] | Irritating. | | | |
| **Sensitisation:** | Based on available data, classification criteria not met. | | | |
| **Repeated dose toxicity:** | Based on available data, classification criteria not met. | | | |
| **Carcinogenicity:** | Based on available data, classification criteria not met. | | | |
| **Mutagenicity:** | Based on available data, classification criteria not met. | | | |
| **Toxicity for reproduction:** | Based on available data, classification criteria not met. | | | |

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| **STOT:** | **STOT SE 3, H335 May cause respiratory irritation.** |
| **Mixture/ Ingredient name** | **Effect** |
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | Hazard category: Specific target organ toxicity - Single Exposure, Category 3<br>Hazard statement: May cause respiratory irritation.<br>Affected organs: respiratory tract<br>Route of exposure: inhalation |
| Ethylene phosphite<br>[ETHYLENE PHOSPHITE] | Hazard category: Specific target organ toxicity - Single Exposure, Category 3<br>Hazard statement: May cause respiratory irritation.<br>Affected organs: respiratory tract<br>Route of exposure: inhalation |
| n-Butyl acetate<br>[BUTYL ACETATE] | Hazard category: Specific target organ toxicity - Single Exposure, Category 3<br>Hazard statement: May cause drowsiness or dizziness.<br>Affected organs: central nervous system |
| **Aspiration hazard:** | No known effect according to our database. |
| **Potential acute health effects** | |
| Eye contact: | Corrosive to the eyes. |
| Inhalation: | May cause nose and throat irritation. Harmful if inhaled. |
| Skin contact: | Corrosive and harmful (toxic) to the skin. |
| Ingestion: | Corrosive and harmful (toxic) if ingested. |
| **Symptoms related to the physical, chemical and toxicological characteristics** | |
| Eye contact: | Conjunctivitis, lacrimation, redness and swelling of eyes, pain, blurred vision, blindness. |
| Inhalation: | Fatigue, cough, irritation, pain, unconsciousness. |
| Skin contact: | Pain, swelling and redness of skin, dermatitis, blistering, necrosis, nausea, vomiting and diarrhoea could develop. |
| Ingestion: | Nausea, vomiting, abdominal pain, and diarrhoea could develop. Abdominal pain. Burns to the mouth and digestive tract (esophagus). Bleeding from gastrointestinal tract. |
| **Potential chronic health effects:** | |
| **Conclusion/Summary** | |
| General | No known significant effects or critical hazards. |
| Carcinogenicity | No known significant effects or critical hazards. |
| Mutagenicity | No known significant effects or critical hazards. |
| Teratogenicity | No known significant effects or critical hazards. |
| Developmental effects | No known significant effects or critical hazards. |
| Fertility effects | No known significant effects or critical hazards. |
| **11.2. Information on other hazards** | |
| | Not available. |

## SECTION 12: Ecological information

**12.1. Toxicity**

| **Aquatic toxicity** | **Based on available data, classification criteria not met.** | | | | | |
|---|---|---|---|---|---|---|
| **Mixture/ Ingredient name:** | **Species:** | **Water media type:** | **Exposure:** | **Dose:** | **Effect conc.:** | **Notes:** |
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | Oncorhynchus mykiss | freshwater | 96 h | LC50 | 85 mg/L | |
| | Danio rerio | freshwater | 35 d | NOEC | 10 mg/L | |
| | Daphnia magna | freshwater | 48 h | EC50 | > 130 mg/L | |
| | Daphnia magna | freshwater | 21 d | NOEC | 53 mg/L | |
| | Pseudokirchneriella subcapitata | freshwater | 72 h | EC50 | 8,2 mg/L | |
| | Pseudomonas putida | freshwater | 17 h | EC50 | 270 mg/L | |

**12.2. Persistence and degradability**

Product contains substances that are not readily biodegradable.

| **Mixture/ Ingredient name:** | **CAS no.:** | **Degradability:** | **Test method/ Guideline:** |
|---|---|---|---|
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | 79-41-4 | Readily biodegradable.<br>Degradation (O2 consumption), 28 d: 86% | OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test) |

**12.3. Bioaccumulative potential**

| **Mixture/ Ingredient name:** | **Effect:** |
|---|---|
| Methacrylic acid<br>2-Methylpropenoic acid<br>[METHACRYLIC ACID] | BCF: 3<br>The substance has a low potential for bioaccumulation based on log Kow <=3 and a low potential to cross biological membranes. |

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| **12.4. Mobility in soil** | |
| | No known significant effects or critical hazards. |
| **12.5. Results of PBT and vPvB assessment** | |
| | Regarding all available data on biotic and abiotic degradation, bioaccumulation and toxicity it can be stated that the substance does not fulfil the PBT criteria (not PBT) and not the vPvB criteria (not vPvB). |
| **12.6. Endocrine disrupting properties** | |
| | No known significant effects or critical hazards. |
| **12.7. Other adverse effects** | |
| | No known significant effects or critical hazards. |

## SECTION 13: Disposal considerations

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|---|---|
| **13.1. Waste treatment methods** | |
| **Product:** | |
| Methods of disposal: | The generation of waste should be avoided or minimised wherever possible.<br>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. 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. 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. |
| Hazardous waste: | Within the present knowledge of the supplier, this product IS regarded as hazardous waste, as defined by EU regulation 1357/2014. |
| European waste catalogue (EWC): | 20 01 27* paint, inks, adhesives and resins containing dangerous substances |
| **Packaging:** | |
| Methods of disposal: | The generation of waste should be avoided or minimised wherever possible.<br>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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. |
| Special precautions: | This material and its container must be disposed of in a safe way. |

## SECTION 14: Transport information

This **preparation is classified** as dangerous according to international transport regulations (ADR/RID, IMDG or ICAO/IATA).
**International transport regulations:**

| | **ADR/RID** | **ADN** | **IMDG** | **IATA** |
|---|---|---|---|---|
| 14.1. UN number or ID number | UN3265 | UN3265 | UN3265 | UN3265 |
| 14.2. UN proper shipping name | Corrosive liquid, acidic, organic, n.o.s. (METHACRYLIC ACID) | | | |
| 14.3. Transport hazard class(es) | 8   | 8   | 8   | 8   |
| 14.4. Packing group | I | I | I | I |
| 14.5. Environmental hazards | No | No | No | No |
| 14.6. Special precautions for user | Limited quantities: 0<br>Exempted quantities:<br>Inner package: 0<br>Outer package: 0 | Limited quantities: 0<br>Exempted quantities:<br>Inner package: 0<br>Outer package: 0 | - | - |
| 14.7. Maritime transport in bulk | Not applicable. | | | |

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| according to IMO instruments | |

## SECTION 15: Regulatory information

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

REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures.
ADR - the European Agreement concerning the International Carriage of Dangerous Goods by Road, concluded at Geneva on 30 September 1957, as amended.
RID - the Regulations concerning the International Carriage of Dangerous Goods by Rail, appearing as Appendix C to the Convention concerning International Carriage by Rail (COTIF) concluded at Vilnius on 3 June 1999, as amended.
ADN - the European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways concluded at Geneva on 26 May 2000, as amended.
IMDG Code - International Maritime Dangerous Goods Code.
IATA/ICAO: ICAO - International Civil Aviation Organization. IATA - International Air Transport Association.
MARPOL 73/78 - International Convention for the Prevention of Pollution from Ships, 1973 as modified by the Protocol of 1978.
COUNCIL DIRECTIVE 1999/13/EC of 11 March 1999 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain activities and installations, with amendments (2004/42/CE).
DIRECTIVE 2008/98/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 19 November 2008 on waste, with amendments.
REGULATION (EC) No 1907/2006 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH):

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| Annex XIV - List of substances subject to authorization: | Substances of very high concern: None of the components are listed. |
| Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles: | Not applicable. |

**15.2. Chemical safety assessment**

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| | A Chemical Safety Assessment has not been carried out. |

## SECTION 16: Other information

**Abbreviations and acronyms:**

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| Full text of abbreviations | CLP: Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008]<br>ADR: The European Agreement concerning the International Carriage of Dangerous Goods by Road<br>RID: International Rule for Transport of Dangerous Substances by Railway<br>IMDG: International Maritime Code for Dangerous Goods<br>IATA: International Air Transport Association<br>CAS: Chemical Abstracts Service<br>EINECS: European Inventory of Existing Commercial Chemical Substances<br>LC50: Median lethal concentration<br>LD50: Median lethal dose<br>REACH: Registration, Evaluation and Authorisation of Chemicals<br>PBT: Persistent, bio-accumulative and toxic<br>vPvB: Very persistent, very bio-accumulative |
| Full text of classifications and H statements [CLP/GHS]: | Flam. Liq. 3, Flammable liquids, Hazard Category 3;<br>H226 Flammable liquid and vapour.<br>Acute Tox. 4, Acute toxicity (oral), Hazard Category 4;<br>H302 Harmful if swallowed.<br>Acute Tox. 4, Acute toxicity (dermal), Hazard Category 4;<br>H312 Harmful in contact with skin.<br>Skin Corr. 1A, Skin corrosion/ irritation, Hazard Category 1A;<br>H314 Causes severe skin burns and eye damage.<br>Skin Irrit. 2, Skin corrosion/ irritation, Hazard Category 2;<br>H315 Causes skin irritation.<br>Eye Dam. 1, Serious eye damage/eye irritation, Hazard Category 1;<br>H318 Causes serious eye damage.<br>Eye Irrit. 2 - Serious eye damage/eye irritation: Hazard Category 2;<br>H319 Causes serious eye irritation.<br>STOT SE 3, Specific target organ toxicity — Single exposure, Hazard Category 3, Respiratory tract |

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| | irritation;<br>H335 May cause respiratory irritation.<br>STOT SE 3, Specific target organ toxicity — Single exposure, Hazard Category 3, Narcosis;<br>H336 May cause drowsiness or dizziness.<br>EUH066 Repeated exposure may cause skin dryness or cracking. |
| Classification system | **Classification for health effects:** conventional (calculation) method is used or generic/specific concentration limits:<br>Acute Tox. 4, H302<br>Acute Tox. 4, H312<br>Skin Corr. 1A, H314<br>Eye Dam. 1, H318<br>STOT SE 3, H335<br>**Classification for physico-chemical effects:**<br>No classified.<br>**Classification for environmental effects:** conventional (calculation) method is used.<br>No classified. |
| **Training advice:** | |
| | In addition to health, safety and environmental training programs for their workers, companies must ensure that workers read, understand and apply the requirements of this SDS. |
| **Used literature:** | |
| | European Chemical Agency's homepage (http://echa.europa.eu/).<br>Safety data sheets of individual components. |
| **DISCLAIMER OF LIABILITY:** | |
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**END OF SAFETY DATA SHEET**