

SunChemical®

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SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II - United Kingdom (UK)

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



1.1 Product identifier

Product name : JCUP1580:CRYSTAL URK1743 YELLOW 4x1L
Product code : JCUP1580
Trade name :  M Premium
 QRES Ink
Index number :

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

| Identified uses | |
|--|--------|
| Colorant; Printing ink related material; Printing ink. | |
| Uses advised against | Reason |
| Not applicable. | |

1.3 Details of the supplier of the safety data sheet

Manufacturer/ Distributor :  SUNJET
 NORTON HILL
 MIDSOMER NORTON
 BATH
 SOMERSET
 BA3 4RT
 UNITED KINGDOM
 (44) 1761 414471
 SUNJET
 NORTON HILL
 MIDSOMER NORTON
 BATH
 SOMERSET
 BA3 4RT
 UNITED KINGDOM
 (44) 1761 414471

e-mail address of person responsible for this SDS : regulatory.affairs@sunchemical.com

1.4 Emergency telephone number

Supplier

Telephone number : (44) 870-8200418 (Chemtrec - 24 hours)
 (1)703 527 3887(Chemtrec International-24 hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition : Mixture

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

Skin Irrit. 2, H315
 Eye Irrit. 2, H319
 Skin Sens. 1, H317
 Repr. 2, H361f
 STOT RE 1, H372
 Aquatic Chronic 2, H411

Ingredients of unknown toxicity : Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 1.6%

Ingredients of unknown ecotoxicity : Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 27.6%

Classification according to Directive 1999/45/EC [DPD]

The product is classified as dangerous according to Directive 1999/45/EC and its amendments.

Classification : R48/23
 Xi; R36/37/38
 R43
 N; R51/53

Human health hazards : Toxic: danger of serious damage to health by prolonged exposure through inhalation. Irritating to eyes, respiratory system and skin. May cause sensitization by skin contact.

Environmental hazards : Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

See Section 16 for the full text of the R-phrases declared above.

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

2.2 Label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Causes serious eye irritation.
 Causes skin irritation.
 May cause an allergic skin reaction.
 Suspected of damaging fertility.
 Causes damage to organs through prolonged or repeated exposure if inhaled.
 Toxic to aquatic life with long lasting effects.

Precautionary statements

Prevention : Wear protective gloves. Wear eye or face protection. Obtain special instructions before use. Do not eat, drink or smoke when using this product.

Response : If exposed or concerned: Get medical attention. IF IN EYES: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes.

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

Hazardous ingredients : -vinylhexahydro-2H-azepin-2-one
 (5-ethyl-1,3-dioxan-5-yl)methyl acrylate
 diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide

SECTION 2: Hazards identification

Supplemental label elements : Not applicable.

2.3 Other hazards

Other hazards which do not result in classification : None known.

SECTION 3: Composition/information on ingredients

Substance/mixture : Mixture

| Product/ingredient name | Identifiers | % | Classification | | Type |
|--|---|-----------|--|---|------|
| | | | 67/548/EEC | Regulation (EC) No. 1272/2008 [CLP] | |
| <input checked="" type="checkbox"/> vinylhexahydro-2H-azepin-2-one | EC: 218-787-6 CAS: 2235-00-9 | 20 < 25 | T; R48/23 Xn; R22 Xi; R36 R43 | Acute Tox. 4, H302 Eye Irrit. 2, H319 Skin Sens. 1, H317 STOT RE 1, H372 | [1] |
| 2-phenoxyethyl acrylate | EC: 256-360-6 CAS: 48145-04-6 | 20 < 25 | R43 N; R51/53 | Skin Sens. 1, H317 Aquatic Chronic 2, H411 | [1] |
| (5-ethyl-1,3-dioxan-5-yl)methyl acrylate | EC: 266-380-7 CAS: 66492-51-1 | 20 < 25 | Xi; R38 R43 N; R51/53 | Skin Irrit. 2, H315 Skin Sens. 1, H317 Aquatic Chronic 2, H411 | [1] |
| monoalkyl or monoaryl or monoalkylaryl esters of acrylic acid | EC: 227-561-6 CAS: 5888-33-5 Index: 607-133-00-9 | 10 < 20 | Xi; R36/37/38 N; R51/53 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335 Aquatic Chronic 2, H411 | [1] |
| diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide | EC: 278-355-8 CAS: 75980-60-8 | 2.5 < 5 | Repr. Cat. 3; R62 N; R51/53 | Repr. 2, H361f Aquatic Chronic 2, H411 | [1] |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | EC: 423-340-5 CAS: 162881-26-7 Index: 015-189-00-5 | 2.5 < 5 | R43 R53 | Skin Sens. 1, H317 Aquatic Chronic 4, H413 | [1] |
| Epoxy Acrylate Oligomer | CAS: PROPRIETARY | 1.0 < 2.5 | Xi; R36/38 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 | [1] |
| trimethylolpropane triacrylate | REACH #: 01-2119489896-11 EC: 239-701-3 CAS: 15625-89-5 Index: 607-111-00-9 | 1.0 < 2.5 | Xi; R36/38 R43 | Skin Irrit. 2, H315 Eye Irrit. 2, H319 Skin Sens. 1, H317 | [1] |
| | | | See Section 16 for the full text of the R-phrases declared above. | See Section 16 for the full text of the H-statements declared above. | |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs or vPvBs or have been assigned a workplace exposure limit and hence require reporting in this section.

Type

- [1] Substance classified with a health or environmental hazard
 [2] Substance with a workplace exposure limit
 [3] Substance meets the criteria for PBT according to Regulation (EC) No. 1907/2006, Annex XIII
 [4] Substance meets the criteria for vPvB according to Regulation (EC) No. 1907/2006, Annex XIII
 [5] Substance of equivalent concern

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SECTION 3: Composition/information on ingredients

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4: First aid measures

4.1 Description of first aid measures

- General** : In all cases of doubt, or when symptoms persist, seek medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and seek medical advice.
- Eye contact** : Check for and remove any contact lenses. Immediately flush eyes with room temperature water for at least 15 minutes, keeping eyelids open. In case of accidental eye contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of the eyes.
- Inhalation** : Remove to fresh air. Keep person warm and at rest. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
- Skin contact** : Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. In case of accidental skin contact, avoid concurrent exposure to the sun or other sources of UV light which may increase the sensitivity of skin.
- Ingestion** : If swallowed, seek medical advice immediately and show this container or label. Keep person warm and at rest. Do NOT induce vomiting.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

4.2 Most important symptoms and effects, both acute and delayed

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion may cause nausea, weakness and central nervous system effects.

Contains 1-vinylhexahydro-2H-azepin-2-one, 2-phenoxyethyl acrylate, (5-ethyl-1,3-dioxan-5-yl)methyl acrylate, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, trimethylolpropane triacrylate, Glycerol Propoxy Triacrylate
 . May produce an allergic reaction.

The following products have sensitizing properties: 1-vinylhexahydro-2H-azepin-2-one, 2-phenoxyethyl acrylate, (5-ethyl-1,3-dioxan-5-yl)methyl acrylate, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, trimethylolpropane triacrylate, Glycerol Propoxy Triacrylate

. Cases of hypersensitivity may occur, possibly with cross-sensitization to other acrylate materials.

4.3 Indication of any immediate medical attention and special treatment needed

- Notes to medical doctor** : In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
- Specific treatments** : No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture : Fire will produce dense black smoke. Exposure to decomposition products may cause a health hazard.

Hazardous thermal decomposition products : Decomposition products may include the following materials: carbon monoxide, carbon dioxide, smoke, oxides of nitrogen.

5.3 Advice for firefighters

Special protective actions for fire-fighters : Cool closed containers exposed to fire with water. Do not release runoff from fire to drains or watercourses.

Special protective equipment for fire-fighters : Appropriate breathing apparatus may be required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : Exclude sources of ignition and ventilate the area. Avoid breathing vapor or mist. Refer to protective measures listed in sections 7 and 8.

For emergency responders : If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions : Do not allow to enter drains or watercourses. If the product contaminates lakes, rivers, or sewers, inform the appropriate authorities in accordance with local regulations.

6.3 Methods and materials for containment and cleaning up : 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 (see Section 13). Preferably clean with a detergent. Avoid using solvents.

SECTION 7: Handling and storage

Persons with a history of skin sensitization problems should not be employed in any process in which this product is used, without Personal Protective Equipment measures.

7.1 Precautions for safe handling : Use only in well-ventilated areas.
 Avoid contact with skin and eyes. Avoid the inhalation of dust, particulates, spray or mist arising from the application of this mixture. Keep container tightly closed. Keep away from heat, sparks and flame.
 Always keep in containers made from the same material as the original one.
 Put on appropriate personal protective equipment (see Section 8).
 Never use pressure to empty. Container is not a pressure vessel.
 Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.
 Comply with the health and safety at work laws.

SECTION 7: Handling and storage

7.2 Conditions for safe storage, including any incompatibilities

: Store between the following temperatures: 5 - 35 °C

☑ Keep away from heat and direct sunlight.

☑ Store in accordance with local regulations.

Notes on joint storage

Keep away from: oxidizing agents, strong alkalis, strong acids.

Additional information on storage conditions

Observe label precautions. Store in a dry, cool and well-ventilated area. Keep away from heat and direct sunlight.

Keep container tightly closed.

Keep away from sources of ignition. No smoking. Prevent unauthorized access.

Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep only in the original container.

☑ Keep away from heat and direct sunlight.

7.3 Specific end use(s)

Recommendations : ☑ Not available.

Industrial sector specific solutions : ☑ Not available.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

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

8.2 Exposure controls

Appropriate engineering controls : ☑ Provide adequate ventilation. Where reasonably practicable, this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapors below the OEL, suitable respiratory protection must be worn.

Individual protection measures

Hygiene measures : ☑ Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 8: Exposure controls/personal protection

| | |
|--|---|
| Eye/face protection | : Use safety eyewear designed to protect against splash of liquids. |
| Skin protection | |
| Hand protection | : Barrier creams may help to protect the exposed areas of the skin but should not be applied once exposure has occurred. |
| Gloves | : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated. |
| Gloves | : RadTech recommend use of: -single use: disposable, unpowdered, nitrile gloves: Use for short duration exposures not exceeding 30 minutes, in situations where only splashes are likely. Do not use where mechanical resistance is required or where puncturing or tearing of the gloves is likely to occur. Replace immediately if punctured, degraded or tearing of the gloves has occurred. -general use: minimum 0.45mm thick, unlined, unpowdered, natural rubber latex-free nitrile gloves: Use for longer duration exposure (up to 4 hours for most UV/EB curing acrylates) or mechanical handling activities. Replace immediately when punctured or when a change of appearance (colour, elasticity, shape) occurs - heavy duty: unlined, natural rubber latex-free nitrile gloves: Use when handling solvents. Avoid the use of chlorinated solvents and limit the use of ketones (e.g. acetone, MEK, MIBK) and ethyl and butyl acetates, as they may accelerate glove deterioration." |
| Body protection | : Personnel should wear protective clothing. |
| Respiratory protection | : In situations where misting or flying may occur, use appropriate certified respirators. |
| Environmental exposure controls | : Do not allow to enter drains or watercourses. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| | |
|---|--|
| Physical state | : Liquid. |
| Color | : Yellow. |
| Odor | : Characteristic. |
| Odor threshold | : Not applicable. |
| Melting point/freezing point | : Not applicable. |
| Flash point | : 96°C |
| VOC | : 0% |
| pH | : Not tested |
| Boiling point | : Lowest known value: 132°C (270°F) |
| Evaporation rate | : 1 (trimethylolpropane triacrylate) compared with butyl acetate |
| Upper/lower flammability or explosive limits | : Not tested |
| Vapor pressure | : Not tested |
| Vapor density | : Not tested |
| Relative density | : Not tested |
| Solubility(ies) | : Not tested |

SECTION 9: Physical and chemical properties

| | |
|---|-------------------|
| Partition coefficient: n-octanol/ water | : Not applicable. |
| Auto-ignition temperature | : Not applicable. |
| Decomposition temperature | : Not applicable. |
| Viscosity | : Not tested |
| Explosive properties | : Not applicable. |
| Oxidizing properties | : Not applicable. |

9.2 Other information

No additional information.

SECTION 10: Stability and reactivity

| | |
|---|--|
| 10.1 Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| 10.2 Chemical stability | : Hazardous reactions or instability may occur under certain conditions of storage or use. |
| 10.3 Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| 10.4 Conditions to avoid | : This mixture contains materials which are unstable under the following conditions: exposure to heat, strong UV sources. These could cause the product to polymerize exothermically. Unintentional contact with them should be avoided. |
| 10.5 Incompatible materials | : Keep away from: free radical initiators, peroxides, strong alkalis, reactive metals. |
| 10.6 Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |
| Hazardous polymerization | : May polymerize on exposure to sunlight. |

SECTION 11: Toxicological information

There are no data available on the mixture itself. Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

This takes into account, where known, delayed and immediate effects and also chronic effects of components from short-term and long-term exposure by oral, inhalation and dermal routes of exposure and eye contact.

Acrylate components of the mixture have irritating properties. Prolonged or repeated contact with skin or mucous membrane may result in irritation symptoms, such as redness, blistering, dermatitis etc. May cause allergic skin reactions with repeated exposure.

If splashed in the eyes, the liquid may cause irritation and reversible damage.

The inhalation of airborne droplets or aerosols may cause irritation of the respiratory tract.

Ingestion may cause nausea, weakness and central nervous system effects.

Contains 1-vinylhexahydro-2H-azepin-2-one, 2-phenoxyethyl acrylate, (5-ethyl-1,3-dioxan-5-yl)methyl acrylate, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, trimethylolpropane triacrylate, Glycerol Propoxy Triacrylate . May produce an allergic reaction.

The following products have sensitizing properties: 1-vinylhexahydro-2H-azepin-2-one, 2-phenoxyethyl acrylate, (5-ethyl-1,3-dioxan-5-yl)methyl acrylate, phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide, trimethylolpropane triacrylate, Glycerol Propoxy Triacrylate

SECTION 11: Toxicological information

. Cases of hypersensitivity may occur, possibly with cross-sensitization to other acrylate materials.

11.1 Information on toxicological effects

Acute toxicity

| Product/ingredient name | Result | Species | Dose | Exposure |
|--|-------------|---------|-------------|----------|
| <input checked="" type="checkbox"/> vinylhexahydro-2H-azepin-2-one | LD50 Dermal | Rat | >2000 mg/kg | - |
| | LD50 Oral | Rat | 1400 mg/kg | - |
| monoalkyl or monoaryl or monoalkylaryl esters of acrylic acid | LD50 Dermal | Rabbit | >5 g/kg | - |
| | LD50 Oral | Rat | 4890 mg/kg | - |
| trimethylolpropane triacrylate | LD50 Dermal | Rabbit | 5170 mg/kg | - |

Irritation/Corrosion

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Sensitization

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Mutagenicity

Not applicable.

Carcinogenicity

Not applicable.

Reproductive toxicity

Not determined - Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Teratogenicity

Not applicable.

SECTION 12: Ecological information

There are no data available on the mixture itself.
Do not allow to enter drains or watercourses.

Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]. See Sections 2 and 3 for details.

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|--|--------------------|----------|-----------|
| <input checked="" type="checkbox"/> diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide | - | 53 to 72 | low |
| phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide | 5.77 | - | high |
| trimethylolpropane triacrylate | 0.67 | - | low |

SECTION 12: Ecological information

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

Mobility : Not available.

12.5 Results of PBT and vPvB assessment

PBT : Not applicable.

vPvB : Not applicable.

12.6 Other adverse effects : No known significant effects or critical hazards.

SECTION 13: Disposal considerations

Do not allow to enter drains or watercourses.

Dispose of according to all federal, state and local applicable regulations.

If this product is mixed with other wastes, the original waste product code may no longer apply and the appropriate code should be assigned.

For further information, contact your local waste authority.

13.1 Waste treatment methods

Product

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Packaging

Methods of disposal : The generation of waste should be avoided or minimized wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

European Waste Catalogue (EWC): : 08 03 12 waste ink containing dangerous substances

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 spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

| | ADR/RID | ADN | IMDG | IATA |
|------------------------------|--|--------|--------|--|
| 14.1 UN number | UN3082 | UN3082 | UN3082 | UN3082 |
| 14.2 UN proper shipping name | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-propenoic acid, 2-phenoxyethyl ester; 2-Propenoic Acid, | | | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-propenoic acid, 2-phenoxyethyl ester; 2-Propenoic Acid, |

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SECTION 14: Transport information

| | | | | |
|--|--|---|---|--|
| | (5-ethyl-1,3-dioxan-5-yl)methyl ester) | <input checked="" type="checkbox"/> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-propenoic acid, 2-phenoxyethyl ester; 2-Propenoic Acid, (5-ethyl-1,3-dioxan-5-yl)methyl ester) | <input checked="" type="checkbox"/> ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (2-propenoic acid, 2-phenoxyethyl ester; 2-Propenoic Acid, (5-ethyl-1,3-dioxan-5-yl)methyl ester) | (5-ethyl-1,3-dioxan-5-yl)methyl ester) |
| 14.3 Transport hazard class(es) | | | | |
| 14.4 Packing group | III | III | III | III |
| 14.5 Environmental hazards | <input checked="" type="checkbox"/> Yes. | <input checked="" type="checkbox"/> Yes. | <input checked="" type="checkbox"/> Yes. | <input checked="" type="checkbox"/> Yes. |
| Additional information | | | | |

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

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code : Not available.

SECTION 15: Regulatory information

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

EU Regulation (EC) No. 1907/2006 (REACH)

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.

Other EU regulations

SECTION 15: Regulatory information


| Product/ingredient name | Carcinogenic effects | Mutagenic effects | Developmental effects | Fertility effects |
|--|----------------------|-------------------|-----------------------|-------------------|
| diphenyl(2,4,6-trimethylbenzoyl) phosphine oxide | - | - | - | Repr. 2, H361f |

Industrial use : The information contained in this safety data sheet does not constitute the user's own assessment of workplace risks, as required by other health and safety legislation. The provisions of the national health and safety at work regulations apply to the use of this product at work.


15.2 Chemical Safety Assessment : This product contains substances for which Chemical Safety Assessments are still to be received.


SECTION 16: Other information


CEPE code : 

 Indicates information that has changed from previously issued version.

Abbreviations and acronyms : ATE = Acute Toxicity Estimate
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No. 1272/2008]
 DNEL = Derived No Effect Level
 EUH statement = CLP-specific Hazard statement
 PNEC = Predicted No Effect Concentration
 RRN = REACH Registration Number

Full text of abbreviated H statements :  H302 Harmful if swallowed.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H335 May cause respiratory irritation.
 H361f Suspected of damaging fertility.
 H372 Causes damage to organs through prolonged or repeated exposure if inhaled.
 H411 Toxic to aquatic life with long lasting effects.
 H413 May cause long lasting harmful effects to aquatic life.

Full text of classifications [CLP/GHS] :  Acute Tox. 4, H302 ACUTE TOXICITY: ORAL - Category 4
 Aquatic Chronic 2, H411 AQUATIC HAZARD (LONG-TERM) - Category 2
 Aquatic Chronic 4, H413 AQUATIC HAZARD (LONG-TERM) - Category 4
 Eye Irrit. 2, H319 SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2
 Repr. 2, H361f TOXIC TO REPRODUCTION [Fertility] - Category 2
 Skin Irrit. 2, H315 SKIN CORROSION/IRRITATION - Category 2
 Skin Sens. 1, H317 SKIN SENSITIZATION - Category 1
 STOT RE 1, H372 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE): INHALATION - Category 1
 STOT SE 3, H335 SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) [Respiratory tract irritation] - Category 3

Full text of abbreviated R phrases :  R62- Possible risk of impaired fertility.
 R48/23- Toxic: danger of serious damage to health by prolonged exposure through inhalation.
 R22- Harmful if swallowed.
 R36- Irritating to eyes.
 R38- Irritating to skin.
 R36/38- Irritating to eyes and skin.
 R36/37/38- Irritating to eyes, respiratory system and skin.
 R43- May cause sensitization by skin contact.

SECTION 16: Other information

R51/53- Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R53- May cause long-term adverse effects in the aquatic environment.

Full text of classifications [DSD/DPD] : Repr. Cat. 3 - Toxic to reproduction category 3

T - Toxic

Xn - Harmful

Xi - Irritant

N - Dangerous for the environment

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Notice to reader

The information in this SDS is based on the present state of our knowledge and on current laws. The product is not to be used for purposes other than those specified under section 1 without first obtaining written handling instructions. It is always the responsibility of the user to take all necessary steps to fulfill the demands set out in the local rules and legislation. The information in this SDS is meant to be a description of the safety requirements for our product. It is not to be considered a guarantee of the product's properties.

Annex