

## Material safety data sheet RayCure UA

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

#### 1.1 Product identifier

Product name : RayCure UA  
Product identifier : xxxxxxxxxxxx

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

Recommended use : Resins system used in the production of fiber reinforced plastics or non-reinforced filled products.

#### 1.3 Details of the supplier of the safety data sheet

Supplier : I.S.T. Innovative Sewer Technologies GmbH  
Rombacher Hütte 17-19  
44795 Bochum  
Germany

Email address of the person responsible for this SDS : peppel@ist-web.com

#### 1.4 Emergency telephone number

Emergency telephone number : +49 234 57988-0  
National advisory body : +49-30-18412-0

### 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]

Harmful if swallowed. H302  
Skin Irritation. 2, H315  
May cause an allergic skin reaction. 1, H317  
Eye Irritation. 2, H319

#### 2.2 Label elements

Labelling in accordance with Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms



Signal word : Warning  
Hazard statements : H302 - Harmful if swallowed.  
: H315 - Causes skin irritation.  
: H317 - Harmful if swallowed.

Supplemental label elements : H319 - Causes serious eye irritation.  
: Not applicable.

### Precautionary statements

General : Not applicable.  
Prevention : P280 - Wear protective gloves: < 1 hour (breakthrough time): Butyl rubber (0.3 mm). Wear eye or face protection.  
Response : P302+P352 - IF ON SKIN: Wash with plenty of water  
: P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
Storage : P403 - Store in a well-ventilated place.  
Disposal : P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazardous ingredients : Urethane methacrylate; Hydroxypropyl methacrylate (CAS-Nr.: 27813-02-1).

### 2.3 Other hazards

Other hazards which do not result in classification : Based on the components the mixture is not PBT classified

## SECTION 3

### : Composition/information on ingredients

Product/ingredient name	Identifiers	%	Classification Regulation (EC) No. 1272/2008 [CLP]
Urethane methacrylate	REACH : Polymer EC: not available CAS: not available	<40	Acute Tox. 4, H302 Skin Irrit. 2, H315 Eye Irrit.2 H319
Hydroxypropyl methacrylate	REACH #: 01-2119490226-37 EC: 248-666-3 CAS: 27813-02-1	<40	Eye Irrit. 2, H319 Skin Sens.1, H317
Isobornyl methacrylate	REACH #: 01-2119886505-27 EC: 231-403-1 CAS: 7534-94-3	<30	Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335
Phenyl bis(2,4,6-trimethylbenzoyl)-phosphine oxide	REACH #: 02- 2119864702-35 EC: 423-340-5 CAS: 162881-26-7	<5	Skin Sens.1, H317 Aquat. Chronic 4, H413

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.

## SECTION 4

### : First aid measures

#### 4.1 Description of first aid measures

Eye contact	: Rinse carefully with water for several minutes. If necessary, remove contact lenses if this is possible without difficulty. Continue flushing. If eye irritation persists: seek medical advice / examination.
Inhalation	: Remove the victim to fresh air and allow to rest in a position that facilitates breathing. Get medical attention if you feel unwell.
Skin contact	: Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
Ingestion	: Get medical attention if you feel unwell. Rinse mouth.
Protection of first-aiders	: Rescue personnel must wear personal protective equipment such as rubber gloves and airtight goggles.

#### **4.2 Most important symptoms and effects, both acute and delayed**

##### Possible acute health effects

No data available.

#### **4.3 Indication of any immediate medical attention and special treatment needed**

No data available.

### **SECTION 5**

#### **: Firefighting measures**

##### **5.1 Extinguishing media**

Suitable : Dry chemical, foam, water mist, carbon dioxide.  
Not suitable : Strong water jet

##### **5.2 Special hazards arising from the substance or mixture**

No data available.

##### **5.3 Advice for firefighters**

Special protective  
Actions for fire-fighters

: Fire-fighting operations shall be carried out on the windward side, selecting the appropriate fire-fighting method appropriate to the environmental conditions. Persons not involved in the extinguishing process must go to a safe place. In the event of surrounding fires: Cool the containers by spraying them with water. Remove all ignition sources if this is safe. Make sure that you wear suitable personal protective equipment during the discharge process.

### **SECTION 6**

#### **: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

For emergency Responders

: Use personal protective equipment. Do not leave any persons on the windward side of the accident area/leak. Provide suitable ventilation after confirming that there is no risk of ignition. Close the leak if it is safe to do so. Access by uninvolved and unauthorized persons in the vicinity of the leak must be controlled by means of rope barriers, etc.

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

: Absorb spilled material with dry sand or an inert absorbent agent (bentonite, diatomaceous earth, etc.) and then collect in a sealable container. Keep large quantities of spilled material by enclosing them. Adhesive or collected material must be disposed of immediately in accordance with applicable laws and regulations.

6.4 Reference to other Sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

## SECTION 7

### : Handling and storage

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

### 7.1 Precautions for safe handling

Protective measures

: Put on appropriate personal protective equipment (see Section 8). Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. Do not ingest. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. 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

: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2 Conditions for safe storage, including any incompatibilities

: Store in accordance with local regulations. Store in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. Store in original container, protected from direct sunlight.

7.3 Specific end use(s)

Recommendations

: Resins system used in the production of fiber reinforced plastics or non-reinforced filled products

Industrial sector specific Solutions

: Not available.

Remarks

: shake/mix before use

### *SECTION 8: Exposure controls/personal protection*

The information in this section contains generic advice and guidance. Information is provided based on typical anticipated uses of the product. Additional measures might be required for bulk handling or other uses that could significantly increase worker exposure or environmental releases.

8.1 Control parameters

No data available.

8.2 Exposure controls

Appropriate engineering Controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

### 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. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection	: Safety glasses with side shields.
Hand protection	: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. < 1 hour (breakthrough time): Butyl rubber (0.3 mm)
Skin and body	: Wear suitable protective clothing.
Respiratory protection	: Gas filter mask must be worn.
Remarks	: Replace damaged gloves.

Advice on personal protection is applicable for high exposure levels. Select proper personal protection based on a risk assessment of the actual exposure situation.

### *SECTION 9: Physical and chemical properties*

#### 9.1 Information on basic physical and chemical properties

Physical state	: Liquid
Color	: yellowish
Odor	: sweet
Odor threshold	: not available
pH	: Not available
Melting point/freezing point	: Not available
Initial boiling point and boiling range:	: Not available
Softening range	: Not available
Flash point	: 113 °C
Flammability (solid, gas)	: Not available
Evaporation rate	: Not available
Upper/lower flammability or explosive limits	: Not available
Vapor pressure	: Not available
Vapor density	: Not available
Relative density	: 1.1 (Water=1)
Density (g/cm <sup>3</sup> )	: 1.1 g/cm <sup>3</sup> (Temperature: 23 °C)
Bulk density	: 1100 kg/m <sup>3</sup> (Temperature: 23 °C)
Solubility	: Insoluble in the following materials: cold water and hot water.
Solubility in water	: Not available
Solubility at room temperature	: Not available
Partition coefficient n-octanol/water	: Not available
Auto-ignition temperature	: Not available
Decomposition temperature	: Not available

Viscosity : Dynamic (25 °C): 700 ±150 mPa·s (550 to 850 cP)  
 Explosive properties : Not available  
 Oxidizing properties : Not available

### SECTION 10: Stability and reactivity

10.1 Reactivity : No data available.  
 10.2 Chemical stability. : No data available.  
 10.3 Possibility of hazardous reactions : A specific reactivity is not known.  
 10.4 Conditions to avoid : No data available.  
 10.5 Incompatible materials : No data available.  
 10.6 Hazardous decomposition products : No data available.

### SECTION 11: Toxicological information

11.1 Information on toxicological effects

No data available.

### SECTION 12: Ecological information

No data available.

### SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. Reference number: 2008/98/EC.

13.1 Waste treatment methods : If possible, feed into the material cycle for reprocessing. Contact the local authorities and a disposal expert with proof of specialist knowledge. The material may only be incinerated in approved hazardous waste incineration plants (in a special incineration furnace equipped with a high temperature zone, residence time control, afterburning plant, DeNOx, fine dust separator and a gas scrubber/absorber).

### SECTION 14: Transport information

Product/ ingredient name	ADR/RID	AND	IMDG	IATA
14.1 UN number	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.
14.2 UN proper shipping name	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.

14.3 Transport hazard class(es)	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.
14.4 Packing group	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.
14.5 Environmental hazards	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.	Not a hazardous substance.

14.6 Special precautions for user : Not a hazardous substance.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code : Not typical.

### *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

Annex XIV : None of the components are listed.

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.

Ozone depleting substances (1005/2009/EU) : Not listed

Prior Informed Consent (PIC) (649/2012/EU) : Not listed

National regulations

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Product/ ingredient name	List name	Status
Not listed		

Montreal Protocol (Annexes A, B, C, E)



Product/ ingredient name	List name	Status
Not listed		

#### Stockholm Convention on Persistent Organic Pollutants

Product/ ingredient name	List name	Status
Not listed		

#### Rotterdam Convention on Prior Informed Consent (PIC)

Product/ ingredient name	List name	Status
Not listed		

#### UNECE Aarhus Protocol on POPs and Heavy Metals

Product/ ingredient name	List name	Status
Not listed		

### 15.2 Chemical safety

Assessment : No Chemical Safety Assessment has been carried out.

Remarks : Note: see section 8 for personal protective equipment and section 13 for waste disposal.

### *SECTION 16: Other information*

16.1 Alterations compared to the previous version : Alterations compared to the previous version are marked with a little (blue) triangle.

16.2 Abbreviations and acronyms : ATE = Acute Toxicity Estimate  
 CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.1272/2008]  
 DMEL = Derived Minimal Effect Level  
 DNEL = Derived No Effect Level  
 EUH statement = CLP-specific Hazard statement  
 PBT = Persistent, bio accumulative and Toxic  
 PNEC = Predicted No Effect Concentration  
 RRN = REACH Registration Number  
 vPvB = Very persistent and very bio accumulative

16.3 Sources of key data : Literature data and/or investigation reports are available through the manufacturer.

### 16.4 Abbreviations

H statement	Fulltext
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H302 H315 H317 H319 H335 H413	Harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause long lasting harmful effects to aquatic life.
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P statement	Fulltext
H280  P302 + P352 P305 + P351 + P338	Wear protective gloves/protective clothing/eye protection/face protection. IF ON SKIN: Wash with plenty of water and soap IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Training advice: Handling of this substance or preparation is restricted to skilled personnel only.

#### Notice to reader

The information contained in the Safety Data Sheet is based on our data available on the date of publication. The information is intended to aid the user in controlling the handling risks; it is not to be construed as a warranty or specification of the product quality. The information may not be or may not altogether be applicable to combinations of the product with other substances or to particular applications

The user is responsible for ensuring that appropriate precautions are taken and for satisfying themselves that the data are suitable and sufficient for the product's intended purpose. In case of any unclarity we advise consulting the supplier or an expert.