



MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product Name: Ackuretta CURO IBT

Chemical Name/Synonyms: Additive plastic

Application: Methacrylate-based resin 3D printing systems with 385 nm light sources for additive manufacturing of transfer guides for bracket positioning.

Company: Ackuretta Technologies Pvt Ltd

Manufacturer: MACK4D

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Section 2: Hazard(s) Identification

Classification of substance or mixture according to Regulation (EC) No. 1272/2008:

Skin irrit. Cat. 2 H315

Skin sens Cat. 1 H317

Eye irrit. Cat. 2 H319

STOT SE Cat. 3 H335

Pictograms:



Signal Word(s): hazard

Hazard statements:

315 Causes skin irritation.

317 May cause an allergic skin reaction.

319 Causes serious eye irritation.

335 May cause respiratory irritation.

Precautionary statements:

264.1 Wash hands thoroughly after handling.

280 Wear protective gloves/protective clothing/eye protection/face protection.

302+352 IF ON SKIN: Wash with plenty of water.

321 Specific treatment: (refer to Section 4).

332+313 If skin irritation occurs: Get medical advice/attention.

362+364 Take off contaminated clothing and wash it before reuse.

Other hazards: NA

Classification according to Directive 67/548/EEC or 1999/45/EC Hazard symbols

Hazard Symbols:



R-phrases

Xi Irritant.

36 Irritating to eyes.

37 Irritating to respiratory system.

38 Irritating to skin.

43 May cause sensitization by skin contact.

S-phrases

20/21 When using do not eat, drink or smoke.

28.2 After contact with skin, wash immediately with plenty of water and soap.

Classification according to NFPA Hazard Identification System

Hazard symbol:



Health hazard: 1

Flammability: 1

Reactivity: 1

Special precautions:

Classification according to HMIS (Hazardous Materials Identification System)

Hazard symbol:

Bisphenol A-ethoxylat (2 EO/ Phenol) Dimethacrylat	
HEALTH	1
FLAMMABILITY	1
PHYSICAL HAZARD	1
PERSONAL PROTECTION	B

Health hazard: 1

Flammability: 1

Physical hazards: 1

Personal protective equipment: B

Section 3: Composition/Information on Ingredients

Substances: This product is a mixture

Mixtures: Composition/information on ingredients.

Composition/information on ingredients

Reagent	Percentage	EC No.: CAS No. REACH Registration	Classification according to Regulation (EC) No. 1272/2008	Hazard class and category
Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat	100%	41637-38-1 41637-38-1	Skin Irrit. 2; H315 Skin Sens. 1; H317 Eye Irrit. 2; H319 STOT SE 3; H335	Xi; R36/37/38 -; R43

Substance with a common (EC) occupational exposure limit value

Section 4: First Aid Measures

General information: Immediately remove stained and soaked clothing. If symptoms are present or in case you are in any doubt, seek medical advice. If the person loses consciousness, put them in the recovery position and seek medical advice immediately.

After inhalation: Make sure that there is fresh air. If the product irritates the respiratory tract, consult a doctor immediately.

After contact with skin: Wash out and rinse with plenty of soap and water.

After contact with eyes: In the event of contact with the eyes, immediately remove contact lenses and rinse with running water for 10-15 minutes while keeping the eyes open. Consult an eye specialist as soon as possible. **After**

swallowing: Never administer something orally to an unconscious person or someone who is experiencing cramps. Consult a doctor immediately. Do not induce vomiting.

The most significant acute and delayed occurring symptoms and impact

Skin contact: May cause an allergic skin reaction.

Information about emergency medical aid or special treatment

Note for the physician: Treat symptomatically.

Section 5: Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media: Dry extinguishing powder; Dry sand

Unsuitable extinguishing media: Excess water

Special hazards arising from the substance or mixture

In case of fire: Wear self-contained breathing apparatus. Coordinate fire-fighting measures to the fire surroundings. **Advice for firefighters**

General information

Do not inhale explosion and combustion gases. Coordinate fire-fighting measures to the fire surroundings. **Special protective equipment for firefighters:**

In case of fire: Wear self-contained breathing apparatus. Do not inhale explosion and combustion gases. Coordinate fire-fighting measures to the fire surroundings.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation. **Environmental precautions**

Do not allow to enter into water or drains.

Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). **Reference to other sections:** Reference to other sections: For information on personal protective equipment, see Section 8. Section 13 contains information about waste disposal.

Section 7: Handling and Storage

Safety precautions for safe handling

Safety precautions during use: Avoid contact with the eyes and skin. Wash contaminated skin thoroughly after handling. The hands and all contaminated parts of the body must be washed with soap and water before leaving the factory premises. Keep away from heat, sparks and open flame. Mechanical suction is required if dust is discharged during handling. Open and handle containers with care. At work, wear suitable safety equipment in the event of longer exposure and/or high concentrations of vapors, spray or mist.

General work hygiene measures: When using the product, do not eat, drink or smoke.

Conditions for safe storage, taking cases of incompatibility into account

Safety precautions for storage: Store in a cool and dry place in a tightly sealed original container. Store at temperatures between 5°C and 30°C. Keep away from frost and direct sunlight. Keep away from hot surfaces, sparks, open flames and other types of ignition sources. Do not smoke.

Specific end uses

Intended end use(s): The intended uses of this product are described as the application in Section 1.

Section 8: Exposure Controls/Personal Protection

Parameters to be monitored: No maximum allowable concentration(s) is/are known for the ingredient(s). **Limitation and monitoring of exposure**

Protective equipment



Suitable technical controller: Adequate room ventilation and local aspiration must be ensured. The maximum allowable concentration of the product or ingredients must be observed.

Eye/face protection: Eye protection corresponding to a recognized standard should be worn if a risk assessment shows that eye contact is possible. The following personal protective clothing should be worn: Chemical safety goggles. Wear close-fitting chemical safety goggles or face protection.

Hand protection: Wear protective gloves. In accordance with the data specified by the protective glove manufacturers, it is required while using them to check whether the gloves maintain their repellent properties and to change them as soon as damage is detected. In the case of exposure up to 8 hours, protective gloves made of the following material must be worn: Nitrile rubber.

Other skin and personal protection: Avoid contact with the skin. Wear suitable clothing to prevent possible skin contact. **Hygiene measures:** Wash contaminated skin thoroughly after handling. Before removing the clothing, wash contaminated clothing and skin immediately with plenty of water. Immediately remove all contaminated garments and

wash before wearing them again. Contaminated work clothing should not be allowed out of the workplace. When using the product, do not eat, drink or smoke.

Respiratory protection: If ventilation is inadequate, suitable respiratory protection must be worn. Wear a protective mask with full face protection and the following filter cartridge: Filter against organic vapors. Highly effective particle filters.

Section 9: Physical and Chemical Properties

Appearance: Liquid
Odor: Specific
Color: Various tooth colors
Density: 1.1 g/cm³
Bulk density: NA
pH: NA
Melting point/freezing point: NA
Initial boiling point and boiling range: NA
Flash point: >150 °C
Flammability (solid, gas): NA
Explosivity: NA
Lower explosion limit: NA
Upper explosion limit: NA
Ignition temperature: NA
Decomposition temperature: NA
Oxidizing potential: NA
Vapour pressure: NA
Vapour density: NA
Evaporation rate: NA
Water solubility: No
Fat solubility: NA
Soluble in:
Partition coefficient: noctanol/water: NA
Viscosity: ca.700-1200 Pa s
Solvent separation test: NA
Solvent content: NA

Section 10: Stability and Reactivity

Reactivity: No information is available.
Chemical stability: No information is available.
Possible hazardous reactions: No information is available.
Conditions to avoid: Incompatible conditions: Reaction with light, risk of polymerization.
Incompatible materials: Incompatible materials Keep away from radical-forming initiators, peroxides. **Hazardous decomposition products:** Hazardous products can polymerize spontaneously.

Section 11: Toxicological Information

Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat 41637-38-1

Specific symptoms in laboratory animals

Irritation and etching

Irritant effect on the skin

Irritant effect on the eye

Irritant effect on the respiratory tract

Additional information

Sensitization

Repeated dose toxicity (subacute, subchronic, chronic)

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

Carcinogenicity

Germ cell mutagenicity

Reproductive toxicity

Section 12: Ecological Information (non-mandatory)

Toxicity

Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat 41637-38-1

Persistence and degradability: No information is available.

Bioaccumulative potential: No information is available.

Mobility in soil: No information is available.

Results of PBT and vPvB assessment: No information is available.

Other adverse effects: No information is available.

Section 13: Disposal Instructions

Proper disposal/product: Disposal in accordance with regulatory requirements.

Proper disposal/packaging: May be disposed of in accordance with local regulatory requirements. **Ecology - waste materials:** Avoid discharge into the environment.

Section 14: Transport Information (non-mandatory)

No hazardous material as defined by the prescriptions. No specific regulation for transport necessary. This product is NOT classified as dangerous for IATA Transport. Non-hazardous; Non-restricted Materials.

UN number: none

Proper UN shipping name: none

Transport hazard classes: No dangerous goods pursuant to transportation regulations.

Packaging group: none

Environmental hazards: none

Special precautions for transport: none

Bulk transport in accordance with Annex II of the MARPOL Convention 73/79 pursuant to IBC Code: No

Section 15: Regulatory Information (non-mandatory)

Regulations on safety, health and environmental protection/specific laws for the substance or mixture EU regulations

Information about Regulation (EC) No. 166/2006 concerning the establishment of a European Pollutant Release and Transfer Register: irrelevant

Regulation (EC) No. 1005/2009 on substances that deplete the ozone layer: irrelevant

Regulation (EC) No. 648/2004 on detergents: irrelevant

Regulation (EC) No. 850/2004 [POP regulation]: irrelevant

Regulation (EU) No. 649/2012 concerning the import and export of hazardous chemicals:

irrelevant **Restriction on use in accordance with REACH Annex XVII No.:** irrelevant

National regulations

National regulations must also be observed.

Instructions on employment restriction: No information is available.

Major Accidents Ordinance Not subject to the German Major Accidents Ordinance.

Solvent Ordinance (31st Federal Immission Protection Ordinance [BlmSchV]): irrelevant

Storage class: 10 Combustible liquids unless LGK 3A or 3B.

Water hazard class (WGK): 1 weak water pollutant (WGK 1)

Section 16: Other Information

Text of H and R phrases (number and full text)

H phrases Text

H315 Causes skin irritation

H317 May cause an allergic skin reaction.

319 Causes serious eye irritation.

335 May cause respiratory irritation.

P phrases

36 Irritating to eyes.

37 Irritating to respiratory system.

38 Irritating to skin.

43 May cause sensitization by skin contact.

Training tips: Only trained personnel should use this product.

Recommended restriction(s) on use: No special measures are required.

Further information: REJECTION OF LIABILITY We have obtained the information in this data sheet from sources that we consider reliable. The accuracy of expressed or implied information cannot be guaranteed. The conditions or methods for handling, storage, use or disposal of the product are beyond our control and possibly also our knowledge. For these and other reasons, we accept no responsibility and expressly reject liability for any losses, damage or costs that may arise from handling, storage, use or disposal of the product or that may be associated therewith in any way. This Safety Data Sheet was created for this product and may only be used for this product. If the product is used as a component of another product, the information indicated in the data sheet may not apply.

This information is based on our current knowledge and should only describe the product with regard to health, safety and environmental conditions. It must therefore not be construed as a guarantee for any specific property of the product.