



# MATERIAL SAFETY DATA SHEET

## Section 1: Identification

**Product Name:** Ackuretta CURO Gingiva

**Chemical Name/Synonyms:** Additive plastic

**Application:** Methacrylate-based resin 3D printing resin for additive manufacturing of gingiva masks (385 nm / 405 nm).

**Company:** Ackuretta Technologies Pvt Ltd

**Manufacturer:** MACK4D

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**MSDS Date of preparation:** 26th of June, 2023

## Section 2: Hazard(s) Identification

**Hazard Classification:** 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

Aquatic chronic Cat. 2 H411

Directive 67/548/EEC: Xi; R36 , Xi; R38 , Xi; R37 , -; R43

**Pictograms:**



**Signal Word(s):** hazard

**Hazard Statements:**

**Hazard warnings:**

H315 Causes skin irritation

H317 May cause an allergic skin reaction

H319 Causes serious eye irritation

H335 May cause respiratory irritation.

**Precautionary Statements:**

P264.1 Wash hands thoroughly after handling.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P302+P352 IF ON SKIN: Wash with plenty of water.

P321 Specific treatment. Please refer to Section 4: First-Aid Measures of this document).

P332+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362+P364 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	
<b>HEALTH</b>	<b>1</b>
<b>FLAMMABILITY</b>	<b>1</b>
<b>PHYSICAL HAZARD</b>	<b>1</b>
<b>PERSONAL PROTECTION</b>	<b>B</b>

**Health hazard:** 1

**Flammability:** 1

**Physical hazards:** 1

**Personal protective equipment:** B

**Section 3: Composition/Information on Ingredients**

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

#### 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 procedures

##### Solvents

**Suitable solvents:** Dry extinguishing powder; Dry sand.

**Unsuitable solvents:** Excess water.

**Particular hazards arising from substance or mixture:** In case of fire: Wear self-contained breathing apparatus. Coordinate fire-fighting measures to the fire surroundings.

##### Information for fire-fighting

**Safety precautions during fire-fighting:** No actions should be taken without appropriate training or which are associated with personal risk.

**Particular protective equipment for fire-fighters:** 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:** Use personal protection equipment. Remove all sources of ignition. Provide adequate ventilation.

**Measures for environmental protection:** Do not allow to enter into water or drains.

**Measures for cleaning/collecting:** Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal

binding agents). Spillages must be collected and disposed of in accordance with the information in Section 13.

**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**

**Odor:** Specific

**Color:** Various

**Melting point/freezing point:** Not determined

**Initial boiling point and boiling range:** Not determined

**Flash point:** >150°C

**Inflammability (solid, gaseous):** Not determined

**Upper/lower inflammability or explosion limits:** Not determined

**Vapor pressure:** Not determined

**Relative density:** 1.1g/cm<sup>3</sup>

**Solubility:** Insoluble in water.

**Viscosity:** Approx. 700-1200 Pa s

**pH:** Not determined

### 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:** Reaction with light, risk of polymerization  
**Incompatible materials:** Reaction with peroxides and rad. Compounds  
**Hazardous decomposition products:** Unstable products can polymerize spontaneously.

### Section 11: Toxicological Information

**Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat**  
**Acute toxicity – oral LD50:** No information available  
**Acute toxicity – dermal LD50:** No information available  
**Acute toxicity – inhalative LC50:** No information available  
**Caustic/irritant effect on the skin:** Does not cause irritation  
**Severe eye damage/irritation:** Does not cause irritation  
**Respiratory tract sensitization:** No information available  
**Skin sensitization:** Sensitizing  
**Germ cell mutagenicity:** ?  
**Carcinogenicity:** No information available  
**Reproductive toxicity:** ?  
**Specific target organ toxicity (repeated exposure):** No information available.

### Section 12: Ecological Information (non-mandatory)

**Toxicity**  
**Bisphenol A-ethoxylat (2 EO/Phenol) Dimethacrylat**  
**Acute toxicity - fish:** LC50, 96 hours: 10.1 mg/l, Brachydanio rerio (zebrafish)  
**Acute toxicity - invertebrate aquatic animals:** EC50, 48 hours: >1.2 mg/l, Daphnia magna  
**Acute toxicity - aquatic plants:** NOEC, 72 hours: 0.21 mg/l, Desmodium subspicatus  
**Acute toxicity - microorganisms:** NOEC, 14 days: >=36.1 mg/l, activated sludge  
**Results of PBT and vPvB assessment:** No information 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 is 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 according to 1999/13/EC about limitation of emissions of volatile organic compounds (VOC-guideline).**

**Regulation (EC) No 2037/2000 concerning materials, which cause damage to the ozone layer.**

**Regulation (EC) No. 648/2004 (Detergents regulation) National regulations:** Observe in addition any national regulations.

**Restrictions of occupation Storage class:** 10 Combustible liquids unless LGK 3A or 3B.

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

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Audio shell**

**Other regulations, restrictions and prohibition regulations**

**Chemical Safety Assessment:** For this preparation a chemical safety assessment has been carried out.

### Section 16: Other Information

**Text of H, R, and EUH phrases (number and full text)**

**H phrases:**

**H315** Causes skin irritation

**H317** May cause an allergic skin reaction.

**H319** Causes serious eye irritation.

**H335** May cause respiratory irritation.

**R 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.

**Data sources:** REGULATION (EC) No. 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No. 1907/2006.

**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.