



MATERIAL SAFETY DATA SHEET

Section 1: Identification

Product Name: Ackuretta CURO Model

Chemical Name/Synonyms: Additive plastic

Application: Methacrylate-based resin 3D printing systems with 385 nm or 405 nm light sources for fabrication of dental models.

Application: Methacrylate-based resin

Company: Ackuretta Technologies Pvt Ltd

Manufacturer: KAIROS 3D Co. Ltd.,

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Section 2: Hazard(s) Identification

Hazard Classification: According to Products Regulations

Classification of the product:

Skin sensibility 1 Skin sensitization

Aquatic chronic 4 Hazardous to the aquatic environment - chronic

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

H401 Toxic to aquatic life

H411 Toxic to aquatic life with long lasting effects

Precautionary Statements:

P280 Wear protective gloves/protective clothing/eye protection/face protection P264 Wash contaminated skin thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace. 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.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.
P337+P313 If eye irritation persists: Get medical advice/attention.
P362+P364 Take off contaminated clothing and wash it before reuse.
P501 Dispose of contents/containers in accordance with local regulations.
Description of other hazards: NA

Section 3: Composition/Information on Ingredients

Monomers based on methacrylic ester with levels of stabilizer, fillers, pigments initiator and accelerator.

Chemical Name	CAS No.	% w/w	Classification according to Regulation (EC) No. 1272/2008
2Furanmenthanol, tetrahydro	97-99-4	>45	Aquatic chronic 4
Synthetic Iron oxide	1317-61-9	<40	Skin Sens. 1; Aquatic chronic 4

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

May polymerize on heating. Sealed containers may rupture explosively if hot.

Solvents

Suitable solvents: Foam, dry fire extinguisher or carbon dioxide (CO₂)

Unsuitable solvents: Do not use a water jet as an extinguishing agent, as this will cause the fire to spread.

Unsuitable extinguishing media: High temperatures may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Use water spray for fog to reduce or direct vapors. Water may not be efficient in actually extinguishing a fire involving this product.

Information for fire-fighting

Particular protective equipment for fire-fighters: Wear self-contained breathing apparatuses (SCBA) and full protective clothing should be worn in fire-fighting conditions.

Section 6: Accidental Release Measures

Personal precautions: Ensure suitable personal protection (including respiratory protection) during removal or spillage.

Measures for environmental protection: Prevent entry into drains.

Measures for cleaning/collecting: Bind leaked material with sand or another inert absorbent. DO NOT absorb onto sawdust or other combustible material. Transfer to container for disposal or recovery. Spillages or uncontrolled discharges into watercourses must be alerted to appropriate regulatory body. Do not discharge into drains/surface waters/groundwater. Maximize ventilation after accidental release.

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:

Occupational Exposure Limits:

Substance	TWA 8 hr *mg/m ³	TWA 8 hr (ppm)
Methacrylic oligomers	Not listed	Not listed
Metallic Oxides	1.0 (Skin)	No vapors
Fillers	Not listed	Not listed

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

Form: Liquid

Odor: Esther like

Colour: Clear/opaque

pH: Not applicable

Melting point/melting range: Not applicable

Boiling point/boiling range: >100°C

Flash point: >90°C

Flammable limits (lower) (%v/v): Not applicable

Upper/lower flammability or explosive limits: Not determined

Auto ignition temperature: >430°C

Danger of explosion: Not applicable

Oxidizing properties: Not applicable

Vapor pressure: Not determined

Relative density: 1.11 - 1.15 g/cm³

Solubility: Poorly soluble

Viscosity: Approx. 800-1500 Pa*s

Section 10: Stability and Reactivity

Conditions to avoid: Conditions to avoid: The product is stabilized. However, polymerization may occur when the expiry date and/or storage temperature is considerably exceeded.

Materials to avoid: When heated above the flash point, flammable vapors are emitted which can mix with air and can burn or be explosive. Vapors are heavier than air and may travel to the source of ignition and flash back. Heat can cause polymerization with a rapid release of energy which may rupture the container explosively. **Incompatible materials:** Strong oxidizers, strong reducers, inert gas, and oxygen scavengers.

Hazardous decomposition products: Carbon oxides when burned.

Section 11: Toxicological Information

Acute toxicity: LD50 acute oral rat: >2000 mg/kg

LD50 acute dermal rat: >2000 mg/kg

Potential routes of exposure/potential health effects

Skin: May cause an allergic skin reaction.

Eye: High vapor concentration may cause irritation.

Inhalation: Irritating to the respiratory system. High atmospheric concentration may lead to irritation of the respiratory tract, dizziness, headache, and anesthetic effects.

Ingestion: Low oral toxicity, but ingestion may cause irritation of the gastrointestinal tract.

Section 12: Ecological Information (non-mandatory)

Environmental Fate and Distribution:

Liquid with low volatility. The product is slightly soluble in water. The product has low potential for Bioaccumulation in small amounts.

Environmental Exposure Controls:

This product should not be allowed to drain in sewers.

Section 13: Disposal Considerations

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

Proper disposal/packaging: May be disposed of in accordance with local regulatory requirements. Decontaminate empty drums before recycling.

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.

Section 15: Regulatory Information (non-mandatory)

EC Classification: Irritant, Sensitizing, and Harmful

Hazard Symbol: Xi: Irritating

H315 Causes skin irritation

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H335 May cause respiratory irritation.

H413 May cause long-lasting harmful effects to aquatic life.

Section 16: Other Information

Training tips: None

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.