BETA DENT CO.

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: ACROSUN Acrylic powder

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Emergency Phone No.: +21 669 464 51 (only available during office hours)

Intended Use: Polymer based on Methyl methacrylate for manufacturing of dental prosthesis, expanding or repairing dental prosthesis, manufacturing of dental regulators and individually formed impression trays.

2. HAZARDS IDENTIFICATION

EC Classification: Not Classified as Dangerous for Supply/Use
Combustible but not readily ignited.
Low toxicity under normal conditions of handling and use.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Polymer based on Methyl methacrylate.

HAZARDOUS INGREDIENT(S)	% w/w	CAS No	EC No	EC Classification
Dibenzoyl peroxide	< 1	94-36-0	202-327-6	E, Xi; R2 R36 R43

4. QUALITY ASSURANCE OF THIS PRODUCT

Polymer are made from the highest quality raw materials through a completely standardized production process which conforms to ISO Standard 9001:2008 and ISO 13485.
Moreover, in its Quality Control Laboratory, New Stetic verifies the fulfilling ofISIRI 2571

5.APPLICATION FEATURES

.Acrylic Mixture Ratios:

Weight ratio: Two parts of Self- cure Polymer + One part of Self-cure Monomer.
Volume ratio: Three parts of Self-cure Polymer + One part of Self-cure Monomer.
Work Time: This mixture allows a work time from 3 to 5 minutes approximately, at a room temperature of 23ºC ±2.
Cure time:
This mixture has a self-polymerizing average time of 10 minutes approximately. These intervals can vary according to the room temperature of the site.
Polishing:
Anatomy and contour are perfect as necessary according to the technical conventional dental. Carefully place the bridge or Crown on the support teeth and establish proper occlusion.

6. FIRST AID MEASURES

Inhalation:
Remove patient from exposure. Obtain medical attention if ill effects occur.
Skin Contact: Wash skin with water. If symptoms (irritation or blistering) occur obtain medical attention.
Eye Contact: Remove particles by irrigating with eye wash solution or clean water, holding
the eyelids apart. Obtain medical attention.
Ingestion: Do not induce vomiting. Wash out mouth with water. Obtain medical attention
if ill effects occur.
Further Medical Treatment
Symptomatic treatment and supportive therapy as indicated.

7. FIRE-FIGHTING MEASURES

Combustible but not readily ignited. Combustion or thermal decomposition will evolve toxic, irritant and flammable vapours. This product can form flammable dust clouds at elevated temperatures.
Incompatible materials: None known
Suitable Extinguishing media: Foam and CO2.
Unsuitable Extinguishing media: Direct jet of water.
Fire-Fighting Protective Equipment: A self contained breathing apparatus and suitable
protective clothing should be worn in fire conditions.

8. HANDLING AND STORAGE

8.1. HANDLING

Avoid contact with eyes. Avoid prolonged skin contact. Work in a well ventilated area. Avoid dust formation.
Process Hazards
Acrosunhot Curing Acrylic powder are usually processed in conjunction with reactive monomers and this may require the use of a higher level PPE than that necessary for the polymer itself. See also
Sections 8 and 11.

8.2. STORAGE

Store in a clean, cool and dry area away from heat sources. Natural ventilation is adequate.
Storage temperature: Preferably not exceeding 25°C

9. EXPOSURE CONTROLS/PERSONAL PROTECTION

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Consideration should be

given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.
The following information is given as general guidance:

Respirators: A suitable mask or dust respirator with filter type P-S pr FFP-S (EN143 and EN149) may be appropriate.
Eye Protection: Safety glasses
Gloves: Not normally required, however use of gloves is recommended to comply with good occupational hygiene practice. Wear suitable gloves, Polyvinyl alcohol or latex gloves. WARNING: PVA is soluble in water.

10. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Powder, clear or pink
Odour: Faint ester like
pH: Not applicable
Boiling point: Not applicable
Melting point: Not applicable
Flash point: Not applicable
Flammable limits : Not applicable
Explosive properties: Weakly to moderate explosible
Oxidising properties: Not applicable
Vapour pressure: Not applicable
Density: 1.18 g/cm^3 at 20°C
Water solubility: Negligible
Solubility: Not available

11. STABILITY AND REACTIVITY

10.1. CONDITIONS TO AVOID

Hazardous reactions: None known

10.2. MATERIALS TO AVOID

Hazardous reactions: None known

10.3. HAZARDOUS DECOMPOSITION PRODUCTS

Hazardous Decomposition Product(s): Methyl methacrylate, carbon monoxide, carbon dioxide

12. TOXICOLOGICAL INFORMATION

According to literature:
Methyl methacrylate is in essential non-toxic, when absorbed into the body by any route. However for some few individuals it is a powerful skin sensitizer. Apart from this skin allergy, human cases of ill health caused by the product are of a low probability.
Long-term inhalation tests on rats and hamsters with exposure to concentrations from 100 to 400 ppm,did not show any chronic toxic effect. However concentrations on excess of 100 ppm volume may be irritating for some people. Handling of the product requires adequate ventilation to prevent accumulation of vapour in work areas.

Inhalation:

Unlikely to be hazardous by inhalation.

Skin contact:

Unlikely to cause skin irritation.
Eye contact:
Dust may cause irritation
Ingestion:
Low oral toxicity
Benzoyl peroxide
Acute oral rat: LD50 = > 5000 mg/kg
Acute inhalation rat: LD50 = 24.3 mg/l / 4 hours
Acute skin: Not irritating
Acute eye: Irritating
On thermal treatment irritating acrylic monomers, like methyl methacrylate, can be formed.
Methyl methacrylate
Acute oral rat: LD50 = 7872 mg/kg
Acute skin rabbit: LD50 = 9400 mg/kg
Acute inhalation rat: LD50 = 7093 ppm / 4 hours
Human patch test: Approximately 1/3 of subjects developed mild redness at site of application. 20% showed sensitivity 10 days later.

13. ECOLOGICAL INFORMATION

Environmental Fate and Distribution
Solid with low volatility. The product is essentially insoluble in water. The product as low potential for bioaccumulation. The product is predicted to have low mobility in soil.
Persistence and Degradation
The product is non-biodegradable in soil. There is no evidence of degradation in soil and water.
Toxicity
The product is predicted to have low toxicity to aquatic organisms.
Effect on Effluent Treatment
The product is essentially insoluble in water and can therefore be separated from aqueous medium by sedimentation and filtration processes at an effluent treatment plan.

14. DISPOSAL CONSIDERATIONS

Acrosun Hot Curing Acrylic powder is considered to be non-hazardous. Incineration may be used. May be disposed of by landfill in accordance with local regulations.

Other Information
The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process unless specified in the text.