MATERIAL SAFETY DATA SHEET: ACRYLIC POLYMER SELF POLYMERIZED FSRA32-001

1 IDENTIFICATION OF PRODUCT

1.1 Chemical Name: Poly (methylmethacrylate).
1.2 Generic Name: Poly (methylmethacrylate).
1.3 Synonyms: PMMA, Acrylic Resin.

2 INFORMATION ABOUT COMPOSITION ELEMENTS

2.1 Hazardous Elements: None.
2.2 Non-hazardous Elements: Poly (methylmethacrylate) (CASH 9011-14-7)

3 HEALTH HAZARD DATA

3.1 Characteristics of material: Odorless fine powder.
3.2 Appearance (in emergencies): Odorless fine powder. If this powder is dispersed in the air, it irritates the eyes.
3.3 Potential Health Hazards: Low oral toxicity. If it is dispersed in the air, it can irritate the eyes. Irritation after skin contact is not known. No adverse health effects are known.

4 FIRST AID MEASURES

4.1 Emergency procedures and first aid after…
- Inhalation: Take out the patient from the exposure area and move him/her to a ventilated place. If any harmful effect appears, call the doctor.
- Eye Contact: Wash immediately the patient's eyes with plenty of water while keeping patient's eyelids completely open. See the ophthalmologist.
- Skin Contact: Wash immediately the skin with plenty of water. Take off contaminated clothing. In case of appearance of any symptom (such as irritation or blisters), see the doctor.
- Swallowing: See the doctor.

4.2 Antidote: Not applicable.
4.3 Information for doctors: Not applicable.

5 FIRE FIGHTING MEASURES

5.1 Flammability of Product: This is a low-flammable product.

5.2 Extinction of Fire: Fire can be extinguished using spray water, foam, dry powder, or CO2

5.3 Instructions for fire extinguishing: Use special protective equipment. In long stays in the contaminated area, use an autonomous breathing equipment and adequate protective clothing. This product breaks down if heated at temperatures higher than 200ºC. The breaking down of this product caused by combustion or overheating can produce irritant and flammable toxic vapors.

6 ACCIDENTAL RELEASE MEASURES

6.1 Techniques, procedures and materials in case of:

- Small spill: Spilled powder is slippery underfoot. If spilled, use gloves to pick it up and put it in a container for its later disposal or recuperation.
- Large spill: Sweep away the spilled product and put it in a waste drum or in a plastic bag. Wash the slippery area with water. Avoid the spilled product to penetrate drainage channels. Uncontrolled throwing of waste of this product into waterways must be communicated to competent authorities.

6.2 Further considerations: Avoid penetration of this product in surface or underground waterways.

7 HANDLING AND STORAGE OF PRODUCT

7.1 Handling: DO NOT PUT THIS PRODUCT IN CONTACT WITH HOT MATERIALS to avoid firing. All polymers degrade somehow if overheated. Avoid eye contact. Avoid long-term skin contact. Avoid inhalation of high concentrations of this powder. Please follow fire fighting measures shown above. This product must be kept away from fire sources.

7.2 Storage: Storage this product at room temperature, in a cool area. Containers of this product must always be well sealed.

7.3 Further information: Acrylic resin for denture bases Veracril® is delivered in specially packaged drums and bottles. Always keep product containers in a clean and cool area, protected from heat or fire sources.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

8.1 How to control exposure to this product: Use a mask to protect yourself from powder. Also use safety glasses, and adequate face protection.

8.2 Individual protective equipment:

- Breathing equipment: Use adequate protective equipment. In case of high levels of exposure, use an adequate mask to protect yourself from powder.
- Eye Protection: For complete protection, use safety glasses and a total-protection face screen.
- Others: Use adequate protective clothing and follow general safety and hygienic measures. Wash your hands after using this product.

8.3 Exposure parameters:

PEL (OSHA): Total powder 5 mg/mm³, 8 Hr, TWA, breathable powder.
TLV ACGIH: Not available.

9 PHYSICAL AND CHEMICAL PROPERTIES OF THIS PRODUCT

- Percentage of Volatile Elements:< 1%
- Solubility in Water: Not significant
- Odor: Odorless
- Physical appearance: Pearls
- Flash Point: 300ºC (572 ºF)

10 STABILITY AND REACTIVITY OF THIS PRODUCT

10.1 Chemical Stability: This product is very stable. When it is overheated or in presence of a catalyst, a new polymerization process may start again.

10.2 Conditions to Avoid: Incompatibility with Peroxide or Azo polymer initiators, strong acids, alkalis, and oxidizing agents; also with bases, acids, and flammable solvents.

10.3 Incompatibility with other materials: Monomers.

10.4 Dangerous Breaking down Products: Monomer Vapors.

10.5 Dangerous Polymerization: Exothermic reactions (that produce heat).

11 TOXICOLOGICAL INFORMATION

11.1 Acute Toxicity:

- Inhalation: Health risks after inhalation of this product are not known. High concentrations of this powder can irritate the respiratory tract. High concentrations of vapors originated from overheating can irritate the respiratory tract.
- Skin Contact: Cases of skin irritation caused by contact with this product are not known.
- If swallowed: This product has low oral toxicity, but if swallowed, it can irritate the gastrointestinal tract.

11.2 Chronic Toxicity:

- Long-term exposure: This product has been used during many years without any evidence of adverse effects. According to different studies, there is no reason to think that Polymethyl Methacrylate represents a carcinogenic or mutagenic risk for people. Long-term exposures do not produce either toxic effects on embryos or foetus or teratogenic effects on pregnant mothers.

12 ECOLOGICAL INFORMATION

12.1 Distribution and Environmental Impact: Volatility of this product is low. It is not soluble in water. It has a low bioaccumulation potential and a low mobility under the surface of the ground.

12.2 Persistence and Degradation: This product is not biodegradable under the surface of the ground. There is no evidence of biodegradation of this product in water or under the surface of the ground.

12.3 Toxicity: Low toxicity for aquatic life.

12.4 Effects on Effluent Treatment: There is difficulty in eliminating this product during biological treatment processes.

13 DISPOSAL CONSIDERATIONS

Recyclable this product if is possible. Do not throw waste material into waterways. Waste disposal of this product must be in accordance with regulations into effect in each country.

WARNING: ¡Laws, regulations and local restrictions can change or be reinterpreted from one country to another and also, they can be different from the ones being into effect in Colombia. This is why considerations about waste disposal of product and its packing may differ from the ones appearing in this document!

14 TRANSPORT INFORMATION

14.1 Dangerous material: None
14.2 Type of Risk: None
14.3 UN Number: Not available
14.4 Classification: Non-dangerous material

15 INFORMATION ABOUT REGULATIONS INTO EFFECT

15.1 In Colombia: Transportation of this product must be made according to provisions of Decree 1609 of 2002 concerning road transportation of chemical and dangerous substances.
15.2 International Regulations: This product must be labeled according to directives of the EEC/Regulations on dangerous substances.

16 IMPORTANT ADDITIONAL INFORMATION

In case of emergency, please call our Industrial -and- Physical Safety Area, phone nº (574) 550 00 00.

Information appearing in this Safety Data Sheet is based on our current knowledge of this product. Our firm is not responsible for inappropriate usage of this product.