# IDENTIFICATION OF PRODUCT

## Chemical Name: Copolymer of methyl methacrylate and ethyl methacrylate.

## Generic Name: Copolymer of methyl methacrylate and ethyl methacrylate.

## Synonyms: Acrylic, copolymer.

## Product recommended uses and restrictions: The product used to make structures for dental rehabilitation. It must be used for dental laboratory and o dental office use only.

## Emergency number: In case of emergency contact the safety and health at work coordination at the following numbers (+57 60 4) 403 87 60, ext. 1304, 1306.

# IDENTIFICATION OF HAZARDS

## GHS Classification:

|  |  |  |
| --- | --- | --- |
| **Health** | **Environment** | **Physical** |
| Eye irritation Category 2B  Respiratory or skin sensitization Category 1 | Not apply | Not apply |

## GHS Labelling:

|  |  |  |
| --- | --- | --- |
| **Symbol** | **Signal word** | **Danger indication** |
|  | Attention | Causes eye irritation |
| HealthHazard | Danger | May cause allergy symptoms, asthma or breathing difficulties if inhaled. |

## Caution indications: May cause irritation to eyes, skin and respiratory tract.

## Appearance in case of emergency: Odorless fine powder, irritant to the eyes if dispersed in the air.

## Potential adverse effects: Low oral toxicity. Irritation after skin contact is not known. No evidence of adverse effects.

## NFPA:



## OSHA regulatory state: This material is considered no hazardous by the OSHA risk communication standard (29 CFR 1910.1200).

# INFORMATION ABOUT COMPOSITION

|  |  |  |
| --- | --- | --- |
| **HAZARDOUS COMPONENTS** | | |
| **Common name** | **Concentration** | **CAS Number** |
| Does not apply | Does not apply | Does not apply |

|  |  |  |
| --- | --- | --- |
| **NON-HAZARDOUS COMPONENTS** | | |
| **Common name** | **Concentration** | **CAS Number** |
| Copolymer of methyl methacrylate and ethyl methacrylate. | 99% | 25685-29-4 |

# FIRST AID MEASURES

## Emergency procedures and first aid in case of:

* Inhalation: Remove the patient from the exposure, take it to a ventilated place. Receive
* attention medical if any effect appears.
* Contact with eyes: Wash the eyes immediately with abundant water, keeping the eyelids open and holding the eyelashes. See the ophthalmologist.
* Contact with skin: Wash the skin immediately with abundant water. Remove contaminated clothes. If symptoms such as irritation or blisters occur, see the physician.
* Ingestion: Drink abundant water. See the physician.

## Most important symptoms/effects (acute and/or delayed): It can cause irritation in the eyes, skin and respiratory tract. There are not relevant data available.

## Antidote: Does not apply.

## Information for physicians: Not available.

# FIRE FIGHTING MEASURES

## Flammability properties: Low flammability

## Suitable extinction of fire: Fire may be extinguished using foam, dry powder, or CO2.

## Unsuitable extinction of fire: Don´t use water.

## Instructions for fire extinguishing: Special protective equipment must be worn. Self-contained breathing apparatus and appropriate protective clothing must be used in case of permanence in the risk area. The product can discompose if it is heated at temperatures above 200 °C (297 °F).

## Combustion or thermal decomposition may develop toxic vapors, irritant and flammable.

## Firefighters’ protection: Evacuate the affected area and attack the fire at a safe distance.

## Protective equipment and firefighters’ protection: Self-contained apparatus and encapsulated suit should be used.

# ACCIDENTAL RELEASE MEASURES

## Techniques, procedures, materials and protective equipment in case of:

* Small spill: Released powder may be slippery. It may be transferred manually, using gloves, to a container for its disposal or recovery.
* Large spill: Sweep and dispose in residues drum or plastic bag. Wash the slippery area with water. Avoid penetration in sumps. Uncontrolled release in waterways must be reported to the corresponding competent authority.

## Environmental precautions: Avoid filtering on land and in water. In case of occurrence large spills or if the product contaminates lakes, rivers or seas inform the authorities competencies according to local legislation.

## Further considerations: Avoid residues go into ground or underground water streams.

# HANDLING AND STORAGE OF PRODUCT

## Handling: Beware of placing the product in contact with hot material in order to avoid burning. Every polymer degrades at some point if there is overheating. Avoid contact with eyes. Avoid prolonged contact with skin. Avoid inhaling high dust concentrations. Follow the firefighting measures. The product must be away from ignition sources.

## Storage: Keep the product covered. Keep in a dry place at 30 °C (86 °F) maximum.

# EXPOSURE CONTROLS AND PERSONAL PROTECTION

## Conditions to control the exposure: Wear mask, safety goggles, and facial protection.

## Engineering controls: Adequate ventilation exhausts fan and eyewash equipment in the areas of product use.

## Personal protective equipment:

## Respiratory equipment: Use adequate protective equipment. It is advisable to wear dust mask if the exposure levels are high.

## Eye protection: Safety goggles and full-face protection.

## Others: Wear appropriate protective clothing. General safety and hygiene measures. Wash hands after use.

## Exposure parameters:

## 

## PEL (OSHA): Total powder 5 mg/mm³, 8 Hr., TWA, breathable powder.

# PHYSICAL AND CHEMICAL PROPERTIES

## Appearance: Pearls in different colors according to reference of polymer.

## Odor: Odorless.

## Odor threshold: Data not available.

## Physical state: Solid

## pH: Not apply.

## Fusion point: Data not available.

* Evaporation percentage: Does not apply.

## Initial point and boiling range: Data not available.

## Flash point: Data not available.

* Evaporation rate: Does not apply.

## Flammability (solid, gas): Data not available.

## Superior/inferior limit of flammability or exploding: Data not available.

* Vapor pressure: Does not apply.
* Specific gravity or density: Data not available.
* Solubility: Insoluble in water.
* Octanol/water partition coefficient: Data not available.

## Self-ignition temperature: 304 °C (579 °F).

## Decomposition temperature: Data not available.

## Heat value: Data not available.

## Particle size: 75 microns approximately.

## Volatile organic compounds content: Data not available.

## Melting point: Data not available.

## Pour point: Data not available.

## Viscosity: Does not apply.

## Bulk density: Data not available.

## Volatility percentage: ˂ 1%.

## Saturated vapor concentration: Does not apply.

## Molecular weight: 800.000.

## Molecular formula: C11O4H18

# STABILITY AND REACTIVITY

## Chemical Stability: Very stable under normal conditions. When it is overheated or in presence of a catalyst, a polymerization process may start.

## Possible hazardous reactions: Exothermic reaction (heat generation)

## Conditions to avoid: Incompatibility with peroxide or azo, strong acids, alkalis, and oxidizing agents; also with bases, acids, and flammable solvents.

## Incompatibility with other materials: Oxidizing agents, strong acids.

## Dangerous decomposition products: Monomer Vapors.

## Hazardous polymerization: Exothermal reactions (heat generation)

# TOXICOLOGICAL INFORMATION

## Possible routes of exposure: Respiratory, dermal and ocular.

## Acute Toxicity:

## Inhalation: Health risks after inhalation of this product are not known. High concentrations of dust may be irritated for respiratory. 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.

## Ingestion: Low oral toxicity, but ingestion may cause irritation of gastrointestinal ways.

## Chronic Toxicity:

## Long-term exposure: This product has been used for many years without evidence of adverse effects. According to studies, there is not any reason to believe that polymethyl methacrylate represents a carcinogenic or mutagenic risk to humans. High exposures do not produce toxic effects for embryos, fetuses, or teratogenic effects in the presence of maternal toxicity.

## Additional information: Data not available.

# ECOLOGICAL INFORMATION

## Ecotoxicity: Solid with low toxicity in aquatic organisms. Low volatility solid.

## Persistence and degradability: The product is non-biodegradable on the ground. There is no evidence of degradation in ground and water.

## Potential of bioaccumulation: Has low bioaccumulation potential.

## Mobility in soil: Low mobility.

## Other adverse effects: Data not available.

# DISPOSAL CONSIDERATIONS

Recycle this product if it 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. This is why considerations about waste disposal of product and its packing may differ from the ones appearing in this document.

# TRANSPORT INFORMATION

## Hazardous material: None.

## Class of Risk: None.

## UN Number: Not available.

## Classification: Non dangerous material.

## Packing group: Non dangerous material.

## Marine pollutant (Yes/No): No.

# REGULATORY INFORMATION

## 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.

## International Regulations: This product must be labeled according to directives of the CEE/Regulations on dangerous substances.

# IMPORTANT ADDITIONAL INFORMATION

The information registered in this document is based on our current knowledge and is provided in good faith but is not given an assurance express or implicit; neither is assumed any responsibility for the incorrect use of the product. This document is prepared according to:

## GHS – Globally Harmonized System of Classification and Labelling of Chemicals –GHS.

## Colombian technical standard NTC 4435:2010. Transport of Merchandises. Safety Data Sheets of Materials. Preparation.