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SAFETY DATA SHEET
DURACRYL FLOW®
DPDDFS-004

1 IDENTIFICATION OF PRODUCT



- 1.1 Chemical Name: Copolymer of methyl methacrylate and ethyl methacrylate.
- 1.2 Generic Name: Copolymer of methyl methacrylate and ethyl methacrylate.
- 1.3 Synonyms: Acrylic copolymer.
- 1.4 Recommended use and product use restrictions: It is used to make dentures. It must be used by trained personnel and only for dental and dental laboratory use.
- 1.5 Emergency number: In case of emergency contact the Safety and Health at Work Coordination at the following numbers (+57 4) 403 87 60, ext. 1304, 1306.

2 IDENTIFICATION OF HAZARDS

2.1 GHS Classification:

Health	Environment	Physical
Eye irritation Category 2B	No data set	No data set
Respiratory or skin sensitization Category 1		

2.2 GHS Labelling:

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

- 2.3 Precautionary indications: May cause irritation to eyes, skin and respiratory tract.
- 2.4 Appearance in case of emergency: Odorless fine powder. If this powder is dispersed in the air, it irritates the eyes.
- 2.5 Potential adverse effects: 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.
- 2.6 NFPA:



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2.7 OSHA regulatory state: This material is considered hazardous by the OSHA risk communication standard (29 CFR 1910.1200).

3 INFORMATION ABOUT COMPOSITION

HAZARDOUS COMPONENTS		
Common name	Concentration	CAS Number
N.A.	N.A.	N.A.

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

4 FIRST AID MEASURES

4.1 Emergency procedures and first aid in case of:

- 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 Most important symptoms/effects (acute and/or delayed): It can cause irritation to eyes, skin and respiratory tract.

4.3 Antidote: Not applicable.

4.4 Information for doctors: Not applicable.

5 FIRE FIGHTING MEASURES

5.1 Flammability properties: This is a low-flammable product.

5.2 Suitable extinction of fire: Fire can be extinguished using spray water, foam, dry powder, or CO₂.

5.3 Unsuitable extinction of fire: Don't use water.

5.4 Instructions for fire extinguishing: Use special protective equipment. In long stays in the contaminated area, use an autonomous breathing equipment and adequate protective

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clothing. This product breaks down if heated at temperatures higher than 200°C. The breaking down of this product caused by combustion or overheating can produce irritant and flammable toxic vapors.

- 5.5 Firefighters' protection: Evacuate the affected area and attack the fire at a safe distance.
- 5.6 Protective equipment and firefighters' protection: autonomous breathing equipment and encapsulated suit must be used.

6 ACCIDENTAL RELEASE MEASURES

- 6.1 Techniques, procedures, materials and protective equipment 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 Environmental precautions: Avoid filtering water in soil and water. In case of large spills or the product infects lakes, rivers or seas inform the competent authorities, according to local legislation.
- 6.3 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 firefighting 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.

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

- 8.1 Conditions to control the exposure: Use a mask to protect yourself from powder. Also use safety glasses, and adequate face protection.
- 8.2 Engineering controls: Adequate ventilation exhaust fan and eyewash equipment in the areas of product use.
- 8.3 Personal protective equipment:

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- 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.

8.4 Exposure parameters:

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

9 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: Not apply.
- Initial point and boiling range: Indeterminate.
- Flash point: Indeterminate.
- Evaporation rate: Not apply.
- Flammability (solid, gas): Data not available.
- Superior/inferior limit of flammability or exploding: Data not available.
- Vapor pressure: Not apply.
- Specific gravity or density: Data not available.
- Solubility: Negligible.
- N-Octanol/water partition coefficient: Data not available.
- Self-ignition temperature: 304 °C (579 °F).
- Decomposition temperature: Undetermined
- Heat value: Data not available.
- Particle size: 40-60 µm.
- Volatile organic compounds content: Data not available.
- Melting point: Not apply.
- Pour point: Not apply.
- Viscosity: Not apply.
- Bulk density: Not apply.
- Volatility percentage: ≤ 1%.
- Saturated vapor concentration: Data not available.
- Molecular weight: Data not available.
- Molecular formula: (C5O2H8)n.
- Spark point: 300 °C (572 °F).

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10 STABILITY AND REACTIVITY

- 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 Possible hazardous reactions: Exothermic reaction (heat generation)
- 10.3 Conditions to avoid: Incompatibility with Peroxide or Azo polymer initiators, strong acids, alkalis, and oxidizing agents; also with bases, acids, and flammable solvents.
- 10.4 Incompatibility with other materials: Monomers.
- 10.5 Dangerous Breaking down Products: Monomer Vapors.
- 10.6 Hazardous Polymerization: Exothermic reactions (that produce heat).

11 TOXICOLOGICAL INFORMATION

- 11.1 Possible routes of exposure: Respiratory, dermal and ocular.
- 11.2 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.
 - 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.
- 11.3 Additional information: Data not available.

12 ECOLOGICAL INFORMATION

- 12.1 Ecotoxicity: There is difficulty in eliminating this product during biological treatment processes. Low toxicity for aquatic life.
- 12.2 Persistence and degradability: 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 Potential of bioaccumulation: 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.
- 12.4 Mobility in soil: Low mobility on the ground.
- 12.5 Other adverse effects: Data not available.

13 DISPOSAL CONSIDERATIONS

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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 Hazardous material: None.
- 14.2 Class of Risk: None.
- 14.3 UN Number: Not available.
- 14.4 Classification: Non-dangerous material.
- 14.5 Packing group: Non-dangerous material.
- 14.6 Marine pollutant (Yes/No): No.

15 REGULATORY INFORMATION

- 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 CEE/Regulations on dangerous substances.

16 IMPORTANT ADDITIONAL INFORMATION

The information registered in this document is based on our current knowledge and is given in good faith, but is no 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.
- NTC – Colombian Technical Norm NTC4435:2010. Transport of Merchandises. Safety Data Sheets of Materials. Preparation.

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