

**Supplier**

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1 **Commercial Product Name**
 Dentine Tooth Powder

2 **Chemical Charecterisation**
 Methacrylate Polymer

3 **Hazards identification**

3.1 **Principal Hazard:** The product should be regarded as a nuisance dust and Occupational Exposure should be maintained below 10 mg/m³ (8 hour TWA). Under certain conditions, as with most organic powders and dusts, dust clouds may be ignited. Details of these properties are given in Sections 5.3 and 9.5.

4 **First-Aid Measures:**

4.1 **Eyes and Skin:** Wash skin in running water and mild soap. After contact with eyes, flush with water.

4.2 **Inhalation:** Polymethacrylates do not give off any noxious gases at ambient temperature. The product is supplied in powder form and precautions should be taken to minimise the exposure to airborne dust. See Section 8 for details of personal protective equipment.

4.3 **Ingestion:** Washout mouth with water. Do not induce vomiting. Give water to drink. If patient feels unwell seek medical attention.

5 **Fire Fighting Measures:**

5.1 **Extinguishing Media:**

Suitable:	Foam, carbon dioxide
Not to be used:	Water

5.2 **Special Exposure Hazards:**

The following vapours may arise during fires:- Carbon Monoxide

5.3 **Dust cloud characteristics:** This product can form flammable dust clouds at elevated temperatures. The Minimum Ignition Temperature of a dust cloud of a similar polymer has been measured at approx. 480°C (IEC 1241-2-1)

6 **Accidental Release Measures:**

6.1 Collect in containers for disposal using approved dust respirator.

7 **Handling and Storage:**

7.1 Store in original container in a cool dry place. Avoid spillages. Since the product is supplied as fine spherical beads, any spillages may cause floors to become extremely slippery.

8 **Exposure Controls and Personal Protection:**

8.1 **Personal Protective Equipment:**

81.1.1 **Respiratory Protection:** In case of exposure levels higher than OES, use an approved respirator in accordance with EN143 (Type-P-S), or EN149 (Type FFP-S). Check with PPE manufacturer, See also Section 4.2 above.

8.1.2 **Hand Protection:** Wear suitable gloves

8.1.3 **Eye Protection:** Wear goggles.

8.2 **Industrial Hygiene:** Powders have a drying effect on the skin and the use of gloves and a barrier cream may reduce or avoid this effect.



9. **Physical and Chemical Properties:** Tested in Accordance with: ISO 6184/1-1985
- 9.1 **Physical Form:** White or Ivory Powder
- 9.2 **Odour:** Mild
- 9.3 **Density:** at 20°C 1.1 - 1.18g/cm³
Bulk Density: 600-750kg/m³
- 9.4 **Explosive properties:** Kst 91bar.m.s⁻² (Weak to moderately explosible, for similar polymer) ISO 6184/1-1985
- 9.5 **Solubility in Water:** Insoluble
- 9.6 **Melting Range:** Approx. 150-230°C
- 9.7 **Flash Point:** Approx. 390°C
- 9.8 **Ignition Temperature:** Approx. 465°C
10. **Stability and Reactivity:**
- 10.1 **Thermal Decomposition:** Polymer will decompose at temperatures over 240°C.
- 10.2 **Hazardous Decomposition Products:** Methacrylate Monomer Vapours
- 10.3 **Hazardous Reactions:** None Known
11. **Toxicological Information:**
Polymethyl methacrylates are generally regarded as biologically inert
12. **Ecological Information:**
This polymer is non-volatile and insoluble so will accumulate in the ground. It is non-biodegradable in soil and is predicted to have low mobility. There is no evidence of degradation in solid or water. The product is predicted to have low toxicity to aquatic organisms. The material is insoluble in water and can therefore be separated from aqueous medium by sedimentation and filtration processes at an effluent treatment plant.
13. **Disposal Information:**
This product is not classified as Special Waste under UK legislation and may be disposed of at approved land fill sites, or by incineration under approved conditions in accordance with local regulations. In the UK this should be in accordance with the Waste Management Duty of Care Code of Practice.
14. **Transport Information:**
Polymethacrylates do not fall under the transportation classification for dangerous substances.
15. **Regulatory Information:**
- 15.1 **Risk Phrases:** None
- 15.2 **Safety Phrases:** None
- 15.3 **Hazard Symbols:** None
- 15.4 **Warning Labels:** None
16. **Other Information:**
The database for this MSDS is stored under Issue No.1. There are changes in Sections 1,2,3,4,5,7,8,9,11,12,13, and 16. The information in this document contains important information to ensure the safe handling, storage and use of this product. The information in this document should be brought to the attention of the person in your organisation responsible for advising on safety matters.
This Material Safety Data Sheet has been compiled according to the principles outlined in EC Directive 91/155/EC.
The information contained does not constitute the users own assessment of workplace risks as required by other Health and Safety legislation. No claim is made for completeness and all applicable laws and regulations have to be considered.
IMPORTANT: USE IN THE MANUFACTURE OF MEDICAL DEVICES AND RELATED PRODUCTS.
Metrodent has performed no clinical testing on the use of this product in any medical application. Metrodent has no data to support the use of this product in any medical application. This product has been manufactured to a specification according to high standards of manufacturing practice. Metrodent supplies this product on the specific understanding that it is the sole responsibility of the medical device manufacturer to ensure that the medical device is both safe and fit for the intended purpose and that this product is suitable for use in its manufacture.