

Material Safety Data Sheet (MSDS)

Product Name: Di Calcium Phosphate Dihydrate Dental Grade / Micronized

MSDS Generate Date: 20-05-2017

Revision Date: 30-12-2024

Supplier:

Rawpharma Biz Pvt Ltd

1101- City Centre 2,

Science City Road,

Sola Ahmedabad Gujarat,

India - 380060.

Contact No.: +91 97272 88479

Email: info@rawpharmabiz.com

Website: www.rawpharmabiz.com

1. Identification of the Substance/Preparation and Company

- **Product Name:** Di Calcium Phosphate Dihydrate Dental Grade / Micronized
- **Synonyms:** Calcium Hydrogen Phosphate Dihydrate, DCPD
- **Recommended Use:** Dental applications, micronized grade, pharmaceutical excipient.

2. Hazards Identification

- **Classification (GHS):** Not classified as hazardous.
- **Hazard Statements:** Non-hazardous under normal use conditions.
- **Precautionary Statements:**
 - Avoid excessive inhalation of dust.
 - Use personal protective equipment if dust is generated.

3. Composition / Information on Ingredients

- **Chemical Name:** Di Calcium Phosphate Dihydrate
- **Formula:** $\text{CaHPO}_4 \cdot 2\text{H}_2\text{O}$
- **CAS Number:** 7757-93-9
- **EC Number:** 231-826-1
- **Purity:** > 98%

4. First Aid Measures

- **Inhalation:** Move to fresh air; seek medical advice if irritation persists.
- **Skin Contact:** Wash with soap and water.
- **Eye Contact:** Rinse cautiously with water for several minutes.
- **Ingestion:** Rinse mouth; if discomfort continues, seek medical attention.

5. Fire Fighting Measures

- **Flammability:** Non-flammable.
- **Suitable Extinguishing Media:** Use water spray, dry chemical, or CO_2 for surrounding fire.
- **Special Hazards:** Emits calcium oxide and phosphorous oxides at high temperatures.
- **Protective Equipment:** Use self-contained breathing apparatus if involved in fire.

6. Accidental Release Measures

- Avoid dust generation.
- Sweep up and collect in suitable containers for disposal.
- Ventilate area and use protective equipment.

7. Handling and Storage

- Handle in accordance with good hygiene practices.
- Store in tightly closed containers in a cool, dry place.
- Protect from moisture.

8. Exposure Controls / Personal Protection

- **Occupational Exposure Limits:** Not established for DCPD; treat as nuisance dust (10 mg/m³).
- **Respiratory Protection:** Dust mask if airborne dust is generated.
- **Skin Protection:** Protective gloves.
- **Eye Protection:** Safety glasses.

9. Physical and Chemical Properties

- **Appearance:** White, crystalline powder, micronized.
- **Odor:** Odorless
- **pH (10% solution):** 6.5–7.5
- **Melting Point:** Decomposes > 400 °C
- **Solubility in Water:** Slightly soluble (~0.2 g/100 mL at 25 °C)
- **Density:** ~2.3 g/cm³

10. Stability and Reactivity

- **Stability:** Stable under normal conditions.
- **Hazardous Reactions:** None under normal use.
- **Decomposition Products:** Calcium oxide and phosphorus oxides at high temperatures.

11. Toxicological Information

- **Acute Toxicity:** Non-toxic at typical exposure levels.
- **Skin/Eye Irritation:** May cause mild irritation by mechanical action.
- **Inhalation:** Dust may cause respiratory irritation.
- **Chronic Effects:** No evidence of carcinogenic, mutagenic, or reproductive toxicity.

12. Ecological Information

- **Ecotoxicity:** Not expected to be harmful to aquatic life.
- **Persistence/Degradability:** Inorganic compound, stable.
- **Bioaccumulation:** Not bioaccumulative.

13. Disposal Considerations

- Dispose of in accordance with local, regional, national, and international regulations.
- Non-hazardous waste classification.

14. Transport Information (Detailed)

- **UN Number:** Not applicable (Non-hazardous material).
- **UN Proper Shipping Name:** Not regulated as a dangerous good.
- **Transport Hazard Class(es):** Not classified.
- **Packing Group:** Not applicable.
- **Environmental Hazards:** Not considered a marine pollutant.
- **Special Precautions for User:**
 - Avoid dust formation during loading/unloading.
 - Use sealed packaging to prevent contamination.
- **Land Transport (ADR/RID):** Not restricted.
- **Sea Transport (IMDG):** Not classified as hazardous; no special requirements.
- **Air Transport (IATA):** Not restricted; can be transported safely by air.
- **Remarks:** Product is stable and non-dangerous; standard handling procedures apply.

15. Regulatory Information

- Complies with FDA, IP, BP, USP pharmacopeial standards for dental/pharmaceutical grade.
- Not classified as hazardous under OSHA, EU CLP, or GHS.

16. Other Information

- **Abbreviation:** DCPD – Di Calcium Phosphate Dihydrate
- **Key Literature:** Safety standards from pharmacopeias and GHS guidelines.
- **Disclaimer:** Information is based on our current knowledge and provided in good faith. It does not constitute a legally binding assurance of product properties.
- **MSDS Generate Date:** 20-05-2017
- **Revision Date:** 30-12-2024
- **Website:** www.rawpharmabiz.com
- MSDS are based on the manufacturer's provided information.