MATERIAL SAFETY DATA SHEET

DIBASIC CALCIUM PHOSPHATE DIHYDRATE

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product name: Di Calcium phosphate Dihydrate
Chemical Name: Dicalcium Orthophosphate, Dihydrate
CAS NO: 7789-77-7
EINECS NO: 231-826-1
Synonyms: Di Basic Calcium Phosphate/ Calcium Hydrogen Phosphate, Dihydrate
Chemical Formula: CaHPO4. 2H2O

Contact information:
SUDEEP PHARMA PVT LTD
129/1/A, GIDC Estate, Nandesari, Baroda -391 340 (India)
Ph : +91 265 284 0656

SECTION 2: INFORMATION ON COMPOSITION

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS No.</th>
<th>EINECS No.</th>
<th>by weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Di Calcium phosphate Dihydrate</td>
<td>7789-77-7</td>
<td>231-826-1</td>
<td>100%</td>
</tr>
</tbody>
</table>

SECTION 3: HAZARD IDENTIFICATION

EMERGENCY OVERVIEW:
Physical Appearance and Odor:
White powder solid, odourless

Warning statements:
Based on currently available data, this product does not meet the regulatory definition of a hazardous substance. However good industrial hygiene practices should be used in handling it.

POTENTIAL HEALTH EFFECTS:
Acute eye:
May cause irritation.

Acute skin:
Skin absorption not likely. May cause slight transient irritation on prolonged contact.

Acute inhalation:
Ducts may cause upper respiratory tract irritation.

Acute ingestion:
This substance is commonly used as a component in food, vitamins and pharmaceutical tablets and may be safely consumed in moderate amounts. Ingestion of large quantities may cause abdominal cramps, nausea, vomiting, diarrhea.

Chronic effect:
This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected.

SECTION 4: FIRST AID MEASURES

First Aid measures for accidental:
Eye Exposure:
Hold eyelids open and flush with a steady, gentle stream of water for at least 15 minutes. Seek medical attention if irritation develops or persists or if visual changes occur.

Skin Exposure:
In case of contact, wash with plenty of soap and water. Seek medical attention if irritation develops or persists.

Inhalation:
If respiratory irritation or distress occurs remove victim to fresh air. Seek medical attention if
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respiratory irritation or distress continues.

Ingestion:
Do not induce vomiting unless instructed to do so by a physician. No harmful affects expected. If appreciable quantities are swallowed, call a physician or poison control centre. Do not Leave victim unattended.

MEDICAL CONDITIONS POSSIBLY AGGRAVATED BY EXPOSURE:
Inhalation of product may aggravate existing chronic respiratory problems such as asthma, emphysema or bronchitis. Skin contact may aggravate existing skin disease.

NOTES TO PHYSICIAN:
All treatments should be based on observed signs & symptoms of distress in the patients. Consideration should be given to the possibility that over exposure to materials other than this product may have occurred.
Treat symptomatically: No specific antidote available.

SECTION 5: FIRE AND EXPLOSION DATA

FIRE HAZARD DATA:
Flash point:
Not Applicable
Extinguishing media:
Not Combustible. Use extinguishing method suitable for surrounding fire.
Special Fire Fighting Procedures:
Fire fighters should wear NIOSH/MSHA approved shelf-contained breathing apparatus and full protective clothing.
Unusual Fire and Explosion hazards:
Not combustible
Hazardous Decomposition Materials (Under Fire Conditions):
None known

SECTION 6: ACCIDENTAL RELEASE MEASURES

Evacuation Procedures and safety:
Wear appropriate protective gear for the situation. See Personal Protection in Section 8.
Containment of Spill:
Follow procedure described below under cleanup and Disposal of Spill.
Cleanup and Disposal of Spill:
Sweep or vacuum up and place in an appropriate closed container (see Section 7: Handling and Storage). Avoid creation of dusty conditions. Clean up residual material by washing area with water and detergent. DO NOT RETURN MATERIAL TO ITS ORIGINAL CONTAINER.
ENVIRONMENTAL AND REGULATORY REPORTING: Do not flush to drain. If spilled on the ground, the affected area should be scraped clean and placed in a appropriate container for disposal. Prevent material from entering public sewer system or any waterways.

SECTION 7: HANDLING AND STORAGE

Minimum/Maximum Storage Temperatures:
Not Available
Handling:
This is a food ingredient for human consumption. Keep containers closed when not being used.
Storage:
Store in closed containers. Store in an area that is cool, dry, sanitary, isolated from all toxic and harmful substances.
SECTION 8: EXPOSURE CONTROLS/ PERSONAL PROTECTION

Introductory Remarks:
These recommendations provide general guidance for handling this product. Because specific environments and material handling practices vary, safety procedure should be developed for each intended application. While developing safe handling procedures, do not overlook the need to clean equipment and piping system for maintenance and repairs. Waste resulting from this procedure should be handled in accordance with section 13.

Disposal consideration:
Assistance with selection, use and maintenance of worker protection equipment is generally available from equipment manufacturers.

Exposure guidelines:
No exposure limits were found for this product or any of its ingredients.

Engineering controls:
Where engineering controls are indicated by use conditions or a potential for excessive exposure exists, the following traditional exposure control techniques may be used to effectively minimize employee exposures, local exhaust ventilation at the point of generation.

Respiratory protection:
When respirators required, select NIOSH/MSHA approved equipment based on actual or potential airborne concentrations and in accordance with the appropriate regulatory standards and/or industrial recommendations.

Eye/Face Protection:
Eye and face protection requirements will vary dependent upon work environment conditions and material handling practices.

Appropriate ANSI Z87 approved equipment should be selected for the particular intended for this material.

It is generally regarded as good practice to wear a minimum of safety glasses with side shields when working in industrial environments.

Skin Protection:
Skin contact should be minimized through use of gloves and suitable long-sleeved clothing (i.e., Shirts and Pants). Consideration must be given both to durability as well as permission resistance.

Work Practice Controls:
Personal Hygiene is an important work practice exposure control measure and the following general measures should be taken when working with or handling this material:

(1) Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored.
(2) Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
(3) Wash exposed skin promptly to remove accidental splashes or contact with this material.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical and Chemical Properties here represent typical properties of this product. Contact the business area using the product information phone number in Section 1 for its exact specifications.

Physical appearance:
White powder solid

Odor:
Odorless

pH:
Not Applicable

Specific Gravity:
Not available

Water solubility:
Slightly soluble 0.08 wt/wt % at 100°C (212°F)
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Melting Point Range: Not Available
Boiling Point Range: Not Available
Vapour Pressure: Not Available
Vapour Density: Not Available
Molecular weight: 172.1

SECTION 10: STABILITY AND REACTIVITY DATA

Chemical stability: This material is stable under normal handling and storage conditions described in section 7.
Condition to be avoided: Dusting conditions, Extreme Humidity
Materials/Chemicals to be avoided: None known
The following hazardous decomposition product might be expected:
Decomposition Type: thermal
None known
Hazardous polymerization will not occur.
Avoid the Following to inhibit the Hazardous polymerization:
Not applicable

SECTION 11: TOXICOLOGICAL INFORMATION

Acute Eye Irritation: No test data found for product.
Acute Skin Irritation:
Toxicological information and interpretation: Skin-Skin irritation, rabbit. Non-irritating
Acute Dermal Toxicity: No test data found for product.
Acute Respiratory Irritation: No test data found for product.
Acute Inhalation Toxicity: No test data found for product.
Acute Oral Toxicity:
Toxicological Information and Interpretation: LD50- lethal dose 50% of test species, > 10000mg/kg. Rat.
Chronic Toxicity: This product does not contain any substances that are considered by OSHA, NTP, IARC or ACGIH to be “probable” or “suspected” human carcinogens.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicological Information: No data found for product.
Chemical fat information: No data found for the product.
**SECTION 13: DISPOSAL CONSIDERATIONS**

**Waste Disposal Method:**
Waste management options should first consider possible re-use or recycling opportunities. Some provinces have active "Waste exchange" networks for re-use and recycling of waste. Contact your local waste management companies to explore available options. All waste management activities must obey local, provincial and federal regulations.
Possible disposal method includes following:
Solidify this material with compatible binders. Then place in a secure landfill.

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**SECTION 14: TRANSPORT INFORMATION**

**Transportation status:** IMPORTANT! Statements below provide additional data on listed DOT classification. The listed transportation classification does not address regulatory variance due to changes in package size, mode of shipment or other regulatory descriptors.

**TDG status:**
Shipping name: NON DANGEROUS

**IMO status:**
Shipping name: NOT REGULATED

**IATA STATUS:**
Shipping name: NOT REGULATED

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**SECTION 15: OTHER REGULATORY INFORMATION**

**Inventory status:**
UNITED STATES (TSCA) Y  
CANADA (DSL) Y  
EUROPE (EINECS/ELINCS) Y  
AUSTRALIA (AICS) Y  
JAPAN (MITI) Y  
SOUTH KOREA (KECL) Y  

Y= All ingredients are on the inventory.
E= All ingredients are on the inventory or exempt from listing.
P= One or more ingredients fall under the polymer exemption or are on the no longer polymer list. All other ingredients are on the inventory or exempt from listing.
N= Not determined or one or more ingredients are not on the inventory and are not exempt from listing.

Inventory Issues:
All functional components of this product are listed on the TSCA inventory.

**WHMIS classification:**
NOT CONTROLLED

This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and the MSDS contains all the information required by the CPR.

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**Section 16: Other information**

The information above is based on current knowledge and experience. The purpose of this safety data sheet is to describe the product is terms of their safety requirements. The above details do not imply guarantee concerning composition, properties or performance. Users should make their own investigations to determine the suitability of the information for their particular purposes.