Material Safety Data Sheet
Calcium Phosphate (Granular)

Section 1 - Product Identification

Synonyms : Calcium Phosphate Granules
Molecular Weight : 310.18 g/mol
Chemical Formula : $Ca_3(PO_4)_2$
Company Identification : Tradeasia International Pte. Limited
Address : 133 Cecil Street # 12-03 Keck Seng Tower, Singapore
Tel: +65-6227 6365
Fax: +65-6225 6286
Email: contact@chemtradeasia.com

Recommended use of the chemical and restrictions on use:
The product is widely used as animal and poultry feeds.

Section 2 – Composition/Information on Ingredients

The product contains greater than 98 percent (%) Calcium Phosphate

Chemical Name	EC/CAS No	Purity, %
Calcium Phosphate Granular	231-840-8/7758-87-4	min. 98.0

Section 3 – Hazards Identification

3.1 Classification of the substance or mixture

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

3.2 Label elements

The product needs to be labelled with a danger sign.

3.3 Other hazards

Potential health effects

Eye

Causes serious eye irritation. Causes redness and pain.

Skin

Causes skin irritation. Causes redness and pain. May be harmful if absorbed through the skin.

Ingestion

Causes gastrointestinal irritation with nausea, vomiting and diarrhoea. Potentially harmful if swallowed.

Inhalation

May cause respiratory irritation. May be harmful if inhaled.

Chronic

Prolonged or repeated exposure may cause adverse health effects.

Section 4 – First-Aid Measures

4.1. Description of first aid measures

Skin contact

Wash skin thoroughly with mild soap and water. Obtain medical attention if irritation develops or persists.

Eye contact

Obtain medical attention if irritation develops or persists. Immediately rinse with water for a prolonged period while holding eyelids wide open.

Inhalation

If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. Give oxygen or artificial respiration if necessary. Obtain medical attention if breathing difficulty persists. Keep warm.

Ingestion

Do not induce vomiting. If victim is conscious and alert, give 4 to 8 ounces of water or milk. Do not give anything by mouth to an unconscious person. Get medical advice and attention if you feel unwell. Seek medical attention if a large amount is swallowed.

4.2. Most important symptoms and effects, both acute and delayed

N.A.

4.3. Indication of any immediate medical attention and special treatment needed

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

Not flammable. Use extinguishing media appropriate for surrounding fire

5.2. Specific hazards arising from the chemical

N.A

5.3. Special protective actions for fire-fighters

Wear self-contained breathing apparatus for firefighting if necessary

Section 6 – Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection. Tight fitting goggles should be worn in dusty areas to reduce dust exposure to the eyes. Collect as any solid. Ventilate area.

6.2. Environmental precautions

Prevent further leakage or spillage into the environment, if safe to do so.

6.3. Methods and material for containment and cleaning up

Contain spill and collect, as appropriate. Transfer to a chemical waste container for disposal in accordance with local rules and regulations. If contaminated with other materials, contain and collect as any solid in suitable containers. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected. Prevent large quantities from contacting vegetation

Section 7 – Handling and Storage

7.1. Precautions for safe Handling

Avoid breathing in dust, fume, mist, vapours or spray. Avoid prolonged and repeated exposure. Handle in accordance with good industrial hygiene and safety procedures. Do not eat, drink or smoke when using this product. Use recommended personal protective equipment. Avoid contact with skin and eyes.

7.2. Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Store in accordance with information listed on the product insert.

Section 8 – Exposure Controls/Personal Protection

8.1. Control parameters

8.2. Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas. Local exhaust or other ventilation should keep dust below Permissible Exposure Limits

8.3. Individual protection measures, such as personal protective equipment (PPE)

Respiratory protection

A respiratory protection program that meets OSHA's 29 CFR 1910.134 and ANSI Z88.2 requirements or European Standard EN149 must be followed whenever workplace conditions warrant respirator use.

Eyes and hands protection

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves must satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body protection

Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance: Solid grey granules
Odour: Odourless
Odour threshold: N.A.
pH: 2.8
Melting point: 109°C
Boiling point: Decomposes
Flash point: N.A.
Evaporation rate: N.A.
Flammability: N.A.
Upper/lower flammability or explosive limits: N.A.
Vapour pressure: N.A.
Vapour density: N.A.
Relative density: 2.22g/cm^3
Solubility in water: Insoluble in water
Partition coefficient: n-octanol/water: N.A
Auto-ignition temperature: N.A.
Decomposition temperature: N.A.
Viscosity: N.A.
Explosive properties: N.A.

Oxidizing properties: N.A.

Section 10 – Stability and Reactivity

10.1. Reactivity

N.A.

10.2. Chemical stability

Stable under recommended storage conditions

10.3. Possibility of hazardous reactions

N.A.

10.4. Conditions to avoid:

Protect from moisture

10.5. Incompatible materials

N.A.

10.6. Hazardous decomposition products

Oxides of calcium and phosphorous

Section 11 – Toxicological Information

Information on toxicological effects

LD50/LC50:

Oral, mouse: LD50 = 10000 gm/kg;
Oral, rat: LD50 = 7940 mg/kg

Acute toxicity

N.A

Skin corrosion / irritation

N.A.

Serious eye damage/ irritation

N.A.

Respiratory or skin sensitization

N.A.

Germcell mutagenicity

DNA Inhibition: Human, Lymphocyte = 600 mmol/L.; Cytogenetic Analysis: Human, Leukocyte = 50 mmol/L.; DNA Damage: Mouse, Lymphocyte = 628 mmol/L.; Mutation in Mammalian Somatic Cells: Mouse, Lymphocyte = 265 mmol/L

Carcinogenicity

N.A.

Reproductive toxicity

Intraplacental, woman: TDLo = 1400 mg/kg (female 16-week(s) after conception) Fertility - abortion.
Intraplacental, woman: TDLo = 1600 mg/kg (female 16-week(s) after conception) Fertility - abortion.

STOT-single exposure

N.A.

STOT-repeated exposure

N.A.

Aspiration Hazard

N.A.

Potential health effects
RTECS: N.A

Section 12 – Ecological Information

12.1. Toxicity
Do not empty into drains
12.2. Persistence and degradability
N.A
12.3. Bioaccumulative potential
N.A
12.4. Mobility in soil
N.A
12.5. Other adverse effects
N.A

Section 13 – Disposal Considerations

13.1. Disposal methods
Product
This material is hazardous to the aquatic environment. Keep out of sewers and waterways. Place in an appropriate container and dispose of the contaminated material at a licensed site. Dispose of waste material in accordance with all local, regional, national, and international regulations.

Contaminated Packaging
Containers can be triply rinsed (or equivalent) and offered for recycling or reconditioning. Alternatively, the packaging can be punctured to make it unusable for other purposes and then be disposed of in a sanitary landfill. Controlled incineration with flue gas scrubbing is possible for combustible packaging materials.

Section 14 – Transport Information

14.1. UN number: N.A.
14.2. UN proper shipping name: N.A
14.3. Transport of hazard classes: N.A
14.4. Packing group: N.A
14.5. Environmental hazards: N.A.
14.6. Special precautions for user: N.A
14.7. Incompatible materials: N.A.

Section 15 – Regulatory Information

15.1. Safety, health and environmental regulations for the substance/mixture
Notification status:

U.S. EPA TSCA Inventory	On the inventory, or in complicance with the inventory
Canadian DSL	On the inventory, or in complicance with the inventory
EINECS	On the inventory, or in complicance with the inventory
South Korea	On the inventory, or in complicance with the inventory
Japanese MITI	On the inventory, or in complicance with the inventory

Ensure all national/local regulations are observed.

Section 16: Additional Information

16.1. Mainly changes made to the previous version of this Material Safety Data Sheet (MSDS):
N.A.

16.2. List of abbreviation and acronyms used in this MSDS

SDS: Safety Data Sheets
Index N°: atomic number of the element most characteristic of the properties of the substance
CAS No: Chemical Abstracts Service number
EC No: EINECS Number: European Inventory of Existing Commercial Substances
Repr. Cat. 2: Substance presumed human reproductive toxicant
Acute Oral Cat. 5: Substance which is of relatively low acute oral toxicity.
GHS: Globally Harmonised System of Classification and Labelling
LD_{50}: Median Lethal Dose
LC_{50}: Lethal Concentration, 50%
N.A.: Not Applicable
Japanese MITI: Japanese Ministry of International Trade and Industry
EC_{50}: Half maximal effective concentration
UN: United Nations
U.S. EPA TSCA Inventory: Inventory of the chemical substances manufactured or processed in the United States according to Toxic Substances Control Act compiled and published under the autority of the Environmental Protection Agency
Canadian DSL: Canadian Domestic Substances List

16.5. Disclaimer of Liability

The information in this MSDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its accuracy, reliability or completeness. The conditions or methods of handling, storage use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. It is the user's responsibility to satisfy himself as to the suitableness and completeness of such information for his own particular use. This MSDS was prepared and is to be used only for this product. If the product is used as a component in another product, this MSDS information may not be applicable.