



# **MSDS - Disodium Phosphate Anhydrous**

Issued April 24, 2006

## **Section 1. Product Identification**

Product Name: Disodium Phosphate Anhydrous

Use: Food ingredient, water treatment

24 Hour Emergency Telephone (Canutec): 1-613-996-6666

Distributed by Pestell Minerals & Ingredients, New Hamburg, ON Canada

## **Section 2. Composition/Information on Ingredients**

Disodium Phosphate Anhydrous 100% w/w CAS No. 7558-79-4

## **Section 3. Hazards Identification**

### **Classification of the substance/preparation**

EC Classification: None

Safety Phrase: S26 S36

### **Human Health Effects**

Contact with eyes or skin may cause irritation. Inhalation of dust may cause coughing and sneezing. Inhalation may cause respiratory irritation. Ingestion of large amounts may cause gastrointestinal irritation including nausea, vomiting and diarrhea.

### **Environmental Effects**

This material is not expected to produce any significant adverse environmental effects when recommended use and instructions are followed.

## **Section 4. First Aid Measures**

### **General**

Treatment is symptomatic and supportive. The product may cause eye and skin irritation. May cause abdominal discomfort if ingested in quantity.

### **Eye Contact**

Avoid contact with eyes. In case of contact with eyes, immediately flush the eyes with plenty of water. Seek medical attention if needed. This dry powder may cause foreign body irritation in some individuals.

### **Skin Contact**

Remove this material from skin with plenty of soap and water. Prolonged contact with dry powder may cause drying or chapping of the skin.

### **Inhalation**

Inhalation of the dust may cause coughing and sneezing. Remove to fresh air immediately. If not breathing give artificial respiration. If breathing is difficult, give oxygen.

### **Ingestion**

If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. DO NOT induce vomiting. No significant effects are expected if small amounts (less than a mouthful) are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea.

## **Section 5. Fire Fighting Measures**

### **Extinguishing Media**

Non-combustible

No special requirement

To extinguish fire use water spray, dry chemical, carbon dioxide or appropriate foam

### **Unsuitable Extinguishing Media**

Non combustible

No special requirements

### **Exposure Hazards**

No special considerations

### **Protective Equipment**

As a general precaution, fire fighters and others exposed wear self contained breathing apparatus.

## **Section 6. Accidental Release Measures**

### **Personal Precautions**

Avoid unnecessary exposure and remove all material from eyes, skin and clothing

### **Environmental Precautions**

Small quantities: Avoid discharge into the environment

Large quantities: Avoid discharge into the environment

### **Method for Cleanup**

Sweep, scoop or vacuum spill material, contaminated soil and other contaminated material and place in clean, dry containers for removal. If possible, complete cleanup on a dry basis. Residual material can be flushed with water.

## **Section 7. Handling and Storage**

### **Handling**

Handle in accordance with good industrial hygiene and safety practices

Avoid contact with eyes

Wash hands immediately after handling

Remove material from clothing

### **Engineering Measures**

Ensure adequate ventilation. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.

### **Storage**

Store in cool dry place to maintain product performance. Product is hygroscopic and should be stored in a dry area.

## **Section 8. Exposure Controls/Personal Protection**

### **Respiratory Protection**

Avoid breathing dust. In case of insufficient ventilation, use approved respiratory protection equipment as described in Section 1 29CFR 1910.134 or European Standard EN149. A dust respirator is recommended.

### **Hand/Skin Protection**

Wear protective gloves, wash hands and contaminated skin thoroughly after handling.

### **Eye Protection**

Wear appropriate eyeglasses or chemical safety goggles.

## **Section 9. Physical and Chemical Properties**

### **General Information**

Chemical Formula:  $\text{Na}_2\text{eP14}$

Form: Crystals

Odour/Colour: Odourless/White

### **Important Health, Safety and Environmental Information**

pH: 9.0 (as a 1% solution)

Vapor Density: 4.9

Specific Gravity: 1.679

Boiling Point: 243-245 degrees C.

Solubility in Water: (g/100 g. H<sub>2</sub>O) 1.7 at 0 degrees C., 11.5 at 25 degrees C., 51.7 at 40 degrees C., 78.8 at 60 degrees C., 102.4 at 100 degrees C.

**Note:** These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

## **Section 10. Stability and Reactivity**

Product is stable under normal conditions of storage and handling. Store in a cool, dry place to maintain product performance.

**Conditions to Avoid:** Store product in dry areas away from moisture. The product is hygroscopic.

**Materials to Avoid:** Incompatible with acids, alkaloids, lead acetate, antipyrine, chloral hydrate, resorcinol and pyrogallol.

**Hazardous Decomposition:** Oxides of sodium and phosphorous may form when heated to decomposition.

## **Section 11. Toxicological Information**

The dry powder or granules may cause foreign body irritation in some individuals. Prolonged contact with the dry powder may cause drying or chapping of the skin. Due to the high alkalinity of this product, prolonged contact with the eyes or skin may cause slight irritation. Inhalation of dust has been reported to produce a mild drying effect on the respiratory tract membranes of exposed workers. Excessive inhalation of dust may be annoying and can mechanically impede respiration.

Sodium phosphates have been used as therapeutic agents in medicinal preparations for their laxative effects. These phosphate salts are incompletely absorbed from the intestinal tract. Due to their osmotic activity, they draw water into the intestine and produce purging.

This product (in anhydrous and hydrated forms) has produced no genetic changes in standard tests using bacterial cells.

## **Section 12. Ecological Information**

**Environmental Toxicity:** This product (in anhydrous forms) has produced no genetic changes in standard tests using bacterial cells.

Rainbow trout, Inland silversides and Mysid shrimp 96hr. LC50>100 mg/L, non toxic

Daphnia magna: 48 hr EC50>100 mg/L, non toxic

**Environmental Fate:** Inorganic compounds in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment. The term biodegradability, as such, is not applicable to inorganic compounds.

### **Section 13. Disposal Considerations**

This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dry material may be landfilled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

### **Section 14. Transport Information**

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Road/Rail, Sea and Air

IMDG/UN: Environmentally hazardous substance, solid, n.o.s., UN 3077, Class 9, PG III

ICAO/IATA passenger aircraft: Environmentally hazardous substance, solid, n.o.s., UN 3077, Class 9, PG III

RID/ADR Canadian TDG: Environmentally hazardous substance, solid, n.o.s., UN 3077, Class 9, PG III+

US DOT: Environmentally hazardous substance, solid, n.o.s., (contains sodium phosphate, dibasic), UN 3077, 9, PG III\*

+ Applies only to packages containing a Reportable Limit of 230 kg or more

\* Applies only to a package containing a Reportable Quantity (RQ) of 5000 lbs or more.

### **Section 15. Regulatory Information**

EC Label

Hazard Symbol: None

R36/37/38: Irritating to eyes, respiratory system and skin

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical attention

Wear suitable protective clothing

Chemical Inventory

USA TSCA: Listed

Canada DSL: Listed

EC: Listed

Japan: Listed

Australia: Listed

Korea/Phillippines/ China: Listed

Other Information:

WHMIS Classification

SARA Hazard Notification: Not controlled

Hazard Categories Under Title III Rules (40 CFR 370): Not applicable

Section 302 Extremely Hazardous Substances: Not applicable

Section 313 Toxic Chemical(s): Not applicable

CERCLA Reportable Quantity: 5,000lb RQ of sodium phosphate, dibasic

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products regulation and the MSDS contain all the information required by the Canadian Controlled Products Regulation.

## **Section 16. Other Information**

NFPA: Health 1, Fire 0, Reactivity 0

HMIS: Health 1, Fire 0, Reactivity 0

### **Disclaimer**

This information contained herein is accurate to the best of our knowledge. We do not suggest or guarantee that any hazards listed herein are the only ones which exist. Pestell Minerals & Ingredients makes no warranty of any kind, expressed or implied, concerning the safe use of this material in your process or combination with any other substances. Effects can be aggravated by other materials and/or this material may aggravate or add to the effects of other materials. This material may be released from gas, liquid or solid materials made directly or indirectly from it. User has the sole responsibility to determine the suitability of the materials for any use and the manner of use contemplated. User must meet all applicable safety and health standards.