



# Material Safety Data Sheet

## Disodium Phosphate (DSP)

### 1. Chemical Product And Company Identification

<b>Identification</b>	<b>Disodium Phosphate (DSP)</b>
Product Name:	DISODIUM PHOSPHATE DIHYDRATE
	Use of the substance or preparation, Food Ingredient

<b>Company Identification:</b>	<b>Hazel Mercantile Limited</b>
<b>Company Identification: (INDIA)</b>	701, Embassy Centre , Nariman Point , Mumbai – 400 021
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### 2. Composition/Information On Ingredients

<b>Composition</b>	
Substance	Disodium Phosphate
CAS No	7782-85-6
%w/w	98+
Risk Phrase	R36/37/38

### 3. Hazards Identification

#### **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 instructions are followed.

### 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, wash with the eyes 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 health effects are expected if small amounts (less than a mouthful) are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea.

## **5. Fire Fighting Measures**

Extinguishing media:	To extinguish fire use water spray, dry chemical, carbon dioxide, or appropriate foam.
Unsuitable extinguishable media:	No special requirement.
Exposure hazards:	No special considerations
Protective equipment:	As a general precaution, firefighters and others exposed, wear self-contained breathing apparatus.

## **6. Accidental Release Measures**

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### **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 environmental – See section 15

### **Method for cleaning up**

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.

## **7. Handling and Storage**

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### **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.



## 8. Exposure Controls/Personal Protection

### **Occupational Exposure limit**

- ACGIH TLV 10 mg/m<sup>3</sup> (inhalable) 8-hr TWA, 3 mg/m<sup>3</sup> (respirable) 8-hr TWA
- OSHA PEL 15 mg/m<sup>3</sup> (total dust) 8-hr TWA, 5 mg/m<sup>3</sup> (respirable) 8-hr TWA

### **Respiratory protection**

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

### **Hand/Skin protection**

Wear protective gloves is recommended; wash hands and contaminated skin thoroughly after handling.

### **Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described in OSHA eye and face regulation in 29 CFR 1910.133 or European Standard EN166.

## 9. Physical and Chemical Properties

### **General Information**

Chemical Formula:	Na <sub>2</sub> HPO <sub>4</sub>
Form:	Granules
Color:	White
Odor:	Odorless
<i>Important health, safety and environmental information</i>	
pH:	9.0 (as a 1% solution)
Vapor Density	4.9
Specific Gravity	1.679`
Melting Point	243 – 245 deg cel
Solubility in Water:	(g./100 g. H <sub>2</sub> O): 1.7 @ 0 deg cel
	11.5 @ 25 deg cel
	51.7 @ 40 deg cel
	78.8 @ 60 deg cel
	102.4 @ 100 deg cel

## 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**

The product is Hygroscopic. Store in dry area away from moisture.

### **Materials to avoid**

Incompatible with acids, alkaloids, lead acetate, antipyrine, chloral hydrate, resorcinol and pyrogallol.

### **Hazardous decomposition**

Oxides of sodium and phosphorus may form when heated to decomposition



## 11. Toxicological Information

Oral - rat LD50:	5,950 mg/kg; practically nontoxic
Dermal - rabbit LD50:	>7,940 mg/kg; practically nontoxic
Eye Irritation - rabbit:	4.2/110.0; slightly irritating
Skin Irritation - rabbit:	0.0/8.0 (24-hr. exp.); nonirritating
DOT skin corrosion - rabbit (4-hr. exp.):	not corrosive

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.

## 12. Ecological Information

### ***Environmental toxicity***

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

- Rainbow trout, Inland silversides and Mysid shrimp 96 hr. LC50 >100 mg/L, non-toxic.
- No algal toxicity data was available for this material.

### ***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.

## 13. Disposal Considerations

### ***Disposal Considerations***

Dry material may be land filled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

## 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.

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



## 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
- S36 Wear suitable protective clothing

### **Chemical Inventory**

- USA TSCA: Listed\*
- Canada DSL: Listed\*
- EC: Listed\*
- Japan Listed\*
- Australia Listed\*
- Korea Listed\*
- Philippines Listed\*
- China Listed\*

## 16. Other Information

Drafted in accordance with ECC Dir 2001/58/EC

<b>MSDS Creation Date:</b>	September 27, 2007
<b>Revision #0 Date</b>	

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