

Safety Data Sheet



1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification

Product Name: DISODIUM PHOSPHATE ANHYDROUS Reference Number: AST10007 Date: May 19, 2015

Use of the substance or preparation

Food Ingredient, water treatment

Company/Undertaking Identification

ICL PERFORMANCE PRODUCTS LP 622 Emerson Road - Suite 500 St. Louis, Missouri 63141

Emergency telephone

In USA call CHEMTREC: 1 800 424 9300

Outside the USA, including ships at sea, call CHEMTREC's international and maritime telephone number (collect calls accepted):+1 (703) 527-3887

In Canada call CANUTEC: 1 613 996 6666

General Information: +1 800 244 6169 (Worldwide)

2. HAZARDS IDENTIFICATION

Classification of the substance/preparation

GHS

This substance does not meet the criteria for classification under GHS.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition

<u>Substance</u>	CAS No.	<u>%w/w</u>
Disodium Phosphate Anhydrous	7558-79-4	100

4. FIRST AID MEASURES

<u>General</u>

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 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

Non-combustible. No special requirement. To extinguish fire use water spray, dry chemical, carbon dioxide, or appropriate foam.

Unsuitable extinguishable media

Non-combustible. 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

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

<u>Handling:</u>

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 ³ (i	nhalable) 8-	-hr TWA, 3 mg/m ³	(respirable) 8-hr TWA
OSHA PEL	15 mg/m ³ (t	otal dusť) 8·	-hr TWA, 5 mg/m ³	(respirable) 8-hr TWA

OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

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

- a) Appearance: White Crystals
- b) Odor: None
- c) Odor threshold: Undetermined.
- d) pH: (as a 1% solution): 9.0
- e) Melting point/freezing point: 243 245 °C
- f) Initial boiling point and boiling range: Undetermined.
- g) Flash point: Undetermined
- h) Evaporation rate: Undetermined.
- i) Flammability (solid, gas): Undetermined.
- j) Upper/lower flammability or explosive limits: Undetermined.
- k) Vapor pressure: Undetermined.
- I) Vapor density: 4.9
- m) Relative density: 1.679
- n) Solubility(ies) : $(g./100 g. H_2O)$: 1.7 @ 0 $^{\circ}C$

11.5 @ 25 ⁰C 51.7 @ 40 ⁰C

78.8 @ 60 [°]C 102.4 @ 100 [°]C

- o) Partition coefficient: n-octanol/water: Undetermined.
- p) Auto-ignition temperature: Undetermined.
- q) Decomposition temperature: Undetermined.
- r) Viscosity: Undetermined.

Chemical Formula: Na₂HPO₄

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.

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 phosphorus may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

Laboratory data

Data from ICL Performance Products LP single-dose (acute) animal studies with this material are given below:

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

Rainbow trout, Inland silversides and Mysid shrimp 96 hr. LC₅₀ >100 mg/L, non-toxic. [FMC I89-1085, 1086 & 1087]

Daphnia magna: 48 hr. EC50 >100 mg/L, non-toxic. [FMC I89-1088]

No algal toxicity data was available for this material.

Environmental fate

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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

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.

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. (contains sodium phosphate, dibasic), UN 3077, 9, PG III*
ICAO/IATA passenger aircraft	UN 3077, Environmentally hazardous substance, solid, n.o.s., 9, PG III*
RID/ADR	Unknown
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.

15. REGULATORY INFORMATION

Chemical Inventory

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

Other information

WHMIS Classification :Not Controlled

SARA Hazard Notification

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: 5,000 lb. 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.

16. OTHER INFORMATION

	<u>Health</u>	<u>Fire</u>	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating	1	0	0	E E = safety glasses, gloves, dust respirator

Reason for revision: Revised section 1 and 9. Supersedes MSDS dated: March 7, 2014

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