



# Safety Data Sheet

## Disodium Phosphate Anhydrous Powder

### Section 1 - Product and Company Identification

<b>Material Name</b>	▪ <b>Disodium Phosphate Anhydrous Powder</b>
<b>CAS Number</b>	▪ 7558-79-4
<b>EINECS</b>	▪ 231-448-7
<b>Molecular Formula</b>	▪ Na <sub>2</sub> HPO <sub>4</sub>
<b>Molecular Weight</b>	▪ 141.96
<b>Product Description</b>	▪ White powder solid with noodor.
<b>Synonyms</b>	▪ Dibasic Sodium Phosphate; Disodium Orthophosphate, Secondary; DSP
<b>Distributor</b>	▪ Global Chemical Resources 1925 Nebraska Avenue Toledo, OH 43607 United States
<b>Telephone</b>	
<b>Technical</b>	▪ 419-242-1004
<b><u>Emergency</u></b>	▪ 800-424-9300 - Chemtrec
<b>Preparation Date</b>	▪ 5/1/2015
<b>Last Revision Date</b>	▪ 5/1/2015

### Section 2 - Hazards Identification



#### Emergency Overview

##### WARNING

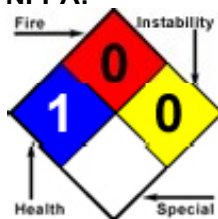
May cause respiratory irritation. Causes skin irritation. Causes serious eye irritation.

<b>Prevention</b>	Keep container tightly closed. Avoid breathing dust, fume, gas, mist, vapours and/or spray. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves, clothing, and eye/face protection.
<b>Response</b>	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell. IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
<b>Storage/Disposal</b>	Store in a well-ventilated place. Keep container tightly closed. Store locked up. Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.



- OSHA  
WHMIS**
- Irritant
  - Class D - Poisonous and Infectious Materials - Division 2 - Subdivision B
- 
- EU**
- Irritant - Xi  
R36/37/38
- 
- GHS**
- Specific Target Organ Toxicity Single Exposure - Category 3, Skin Corrosion/Irritation - Category 2, Serious Eye Damage, Eye Irritation - Category 2A
- Route Of Entry**
- Inhalation, Skin, Eye, Ingestion/Oral
- Medical Conditions Aggravated by Exposure**
- Disorders of the lungs, Skin/Dermal,

**NFPA:**



**Potential Health Effects**

**Inhalation**

- Acute (Immediate)** ▪ May cause irritation.
- Chronic (Delayed)** ▪ No data available.

**Skin**

- Acute (Immediate)** ▪ May cause irritation.
- Chronic (Delayed)** ▪ No data available.

**Eye**

- Acute (Immediate)** ▪ May cause irritation.
- Chronic (Delayed)** ▪ No data available.

**Ingestion**

- Acute (Immediate)** ▪ Ingestion of large quantities may cause irritation, nausea, vomiting, diarrhea and abdominal cramps.
- Chronic (Delayed)** ▪ No data available.

**Carcinogenic Effects**

- This product does not contain any ingredient designated by IARC, NTP, ACGIH or OSHA as probable or suspected human carcinogens.

See Section 12 for Ecological Information.

**Section 3 - Composition/Information on Ingredients**

### Hazardous Components

Chemical Name	CAS	%(weight)	UN;EINECS	LD50/LC50	EU Classification & R Phrases	Other
Sodium salt phosphoric acid (1:2)	7558-79-4	100%	231-448-7	Ingestion/Oral-Rat LD50: =17000 mg/kg	NDA	NDA

Under United States Regulations (29 CFR 1900.1200 - Hazard Communication Standard), this product is considered hazardous. In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS). This product is considered dangerous according to the European Directive 67/548/EEC. According to Regulation (EC) No. 1272/2008 (CLP) this material is considered hazardous. According to the Globally Harmonized Standard for Classification and Labeling (GHS) this product is considered hazardous.

See Section 11 for Toxicological Information.

### Section 4 - First Aid Measures

- Inhalation**
  - Skin**
  - Eye**
  - Ingestion**
  - Notes to Physician**
  - Other Information**
- Move victim to fresh air. If signs/symptoms continue, get medical attention.
  - IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.
  - Flush eyes with water for at least 15 minutes while holding eyelids open. Remove contact lenses if worn. If eye irritation persists: Get medical advice/attention.
  - If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. If victim is conscious and alert, give 2-3 glasses of water to drink. Seek immediate medical attention. Do not leave victim unattended. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. Vomiting may occur spontaneously. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.
  - All treatments should be based on observed signs and symptoms of distress in the patient. Consideration should be given to the possibility that overexposure to materials other than this product may have occurred. Ingestion of large quantities of phosphate salts (over 1.0 grams for an adult) may cause an osmotic catharsis resulting in diarrhea and probable abdominal cramps. Larger doses such as 4-8 grams will almost certainly cause these effects in everyone. In healthy individuals most of the ingested salt will be excreted in the feces with the diarrhea and, thus, not cause any systemic toxicity. Doses greater than 10 grams hypothetically may cause systemic toxicity. Treatment should take into consideration both anionic and cation portion of the molecule.
  - Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

See Section 2 for Potential Health Effects.

### Section 5 - Fire Fighting Measures

- Extinguishing Media**
  - Unsuitable Extinguishing Media**
  - Firefighting Procedures**
  - Unusual Fire and Explosion Hazards**
  - Hazardous Combustion Products**
  - Protection of Firefighters**
- Not combustible. Use extinguishing media suitable for surrounding fire.
  - None known.
  - Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later.
  - Non-combustible.
  - Oxides of sodium, oxides of phosphorus.
  - Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters' protective clothing will only provide limited protection.

### Section 6 - Accidental Release Measures


- Personal Precautions**
  - Emergency Procedures**
  - Environmental Precautions**
  - Containment/Clean-up Measures**
  - Prohibited Materials**
- Do not touch or walk through spilled material.
  - Keep unauthorized personnel away.
  - Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.
  - Sweep or vacuum up and place in an appropriate closed container. Clean up residual material by washing area with water and detergent. Collect washings for disposal.
  - None known.

## Section 7 - Handling and Storage

- Handling**
  - Storage**
  - Special Packaging Materials**
  - Incompatible Materials or Ignition Sources**
- Avoid direct or prolonged contact with skin and eyes. Avoid breathing dust. Keep containers closed when not in use.
  - Product is hygroscopic and tends to cake on storage. Store in an area that is cool, dry and isolated from all toxic and harmful substances. Store in a well-ventilated place. Keep container tightly closed.
  - None known.
  - No data available

## Section 8 - Exposure Controls/Personal Protection

### Personal Protective Equipment

- Pictograms**
  - Respiratory**
  - Eye/Face**
  - Hands**
  - General Industrial Hygiene Considerations**
  - Engineering Measures/Controls**
- 
  - For limited exposure use an N95 dust mask. For prolonged exposure use an air-purifying respirator with high efficiency particulate air (HEPA) filters. Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or symptoms are experienced.
  - Wear safety glasses.
  - Wear appropriate gloves.
  - Do not use, and/or consume foods, beverages, tobacco products, or cosmetics in areas where this material is stored. Wash hands and face carefully before eating, drinking, using tobacco, applying cosmetics, or using the toilet.
  - Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Exposure Limits/Guidelines						
	Result	ACGIH	Argentina	Canada Ontario	Canada Quebec	China
Disodium Phosphate Anhydrous Powder	STELs	Not established	Not established	Not established	Not established	16 mg/m3 STEL (free SiO2 <10%, except asbestos and toxic substances. Use PC-STEL of silica When free SiO2 >10%, total)  <i>as Particulates not otherwise classified (PNOC)</i>
	TWAs	10 mg/m3 TWA (inhalable particles, recommended); 3 mg/m3 TWA (respirable particles, recommended)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWA (inhalable fraction, particulate matter containing no asbestos and less than 1% crystalline silica); 3 mg/m3 TWA (respirable fraction, particulate matter containing no asbestos and less than 1% crystalline silica)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWAEV (inhalable particulate); 3 mg/m3 TWAEV (respirable particulate)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWAEV (total dust, containing no asbestos and less than 1% crystalline silica)  <i>as Particulates not otherwise classified (PNOC)</i>	8 mg/m3 TWA (free SiO2 <10%, except asbestos and toxic substances. Use PC-TWA of silica When free SiO2 >10%, total)  <i>as Particulates not otherwise classified (PNOC)</i>

Exposure Limits/Guidelines (Con't.)					
	Result	Malaysia	New Zealand	OSHA	Singapore
Disodium Phosphate Anhydrous Powder	TWAs	10 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, inhalable fraction); 3 mg/m3 TWA (particulate matter containing no asbestos and <1% crystalline silica, respirable fraction)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 TWA (inspirable dust); 3 mg/m3 TWA (respirable dust)  <i>as Particulates not otherwise classified (PNOC)</i>	15 mg/m3 TWA (total dust); 5 mg/m3 TWA (respirable fraction)  <i>as Particulates not otherwise classified (PNOC)</i>	10 mg/m3 PEL  <i>as Particulates not otherwise classified (PNOC)</i>

**Key to abbreviations**

MSHA = Mine Safety and Health Administration

NIOSH = National Institute of Occupational Safety and Health

PEL = Permissible Exposure Level determined by the Occupational Safety and Health Administration (OSHA)

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

TWAEV = Time-Weighted Average Exposure Value

ACGIH = American Conference of Governmental Industrial Hygiene

OSHA = Occupational Safety and Health Administration

**Section 9 - Physical and Chemical Properties**

**Physical Form**

- Solid

**Appearance/Description**

- White powder solid with noodor.

Color : White		Odor : Odorless	
Taste : NDA		Odor Threshold : NDA	
Boiling Point:	NDA	Vapor Pressure:	NDA
Melting Point:	NDA	Vapor Density:	NDA
Specific Gravity:	NDA	Evaporation Rate:	NDA
Density:	NDA	VOC (Wt.):	NDA
Bulk Density:	NDA	VOC (Vol.):	NDA
pH:	9.1 (@ 1 wt/wt%)	Volatiles (Wt.):	NDA
Water Solubility:	Soluble 11 %	Volatiles (Vol.):	NDA
Solvent Solubility:	NDA	Flash Point:	NDA
Viscosity:	NDA	Flash Point Test Type:	NDA
Half-Life:	NDA	UEL:	NDA
Octanol/Water Partition coefficient:	NDA	LEL:	NDA
Coefficient of water/oil distribution:	NDA	Autoignition:	NDA
Bioaccumulation Factor:	NDA	Bioconcentration Factor:	NDA
Biochemical Oxygen Demand BOD/BOD5:	NDA	Chemical Oxygen Demand:	NDA
Persistence:	NDA	Degradation:	NDA

**Section 10 - Stability and Reactivity****Stability**

- Stable under normal temperatures and pressures.

**Hazardous Polymerization Conditions to Avoid**

- Hazardous polymerization will not occur.
- Dusting conditions, extreme heat, extreme humidity.

**Incompatible Materials**

- Strong acids, alkaloids, pyrogallol, lead acetate, resorcinol

**Hazardous Decomposition Products**

- Oxides of sodium. Oxides of phosphorus.

**Section 11 - Toxicological Information****Other Material Information**

- May cause irritation to skin, eye and respiratory tract.

Disodium Phosphate Anhydrous Powder				7558-79-4					
Test Type	Dosage	Units	Route	Species	Duration	Results	Test Class	Target Organs	Comments
Acute Toxicity	17000	mg/kg	Ingestion/Oral	Rat	NDA	LD50	NDA	NDA	NDA
Irritation	500	mg	Eye	Rabbit	24 Hour(s)	NDA	Mild irritation	NDA	NDA
Irritation	500	mg	Skin	Rabbit	24 Hour(s)	NDA	Mild irritation	NDA	NDA

**Key to abbreviations**

LD = Lethal Dose

**Section 12 - Ecological Information****Ecological Fate**

- No data found for product.

**Persistence/Degradability**

- No specific biodegradation test data located. While the alkalinity of this material is readily reduced in natural waters, the resulting phosphate may persist indefinitely or incorporate into biological systems.

- Bioaccumulation Potential**   ▪ No data found for product.  
**Mobility in Soil**               ▪ No data found for product.

**Section 13 - Disposal Considerations**

- Product**                               ▪ Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

**Section 14 - Transportation Information**

**DOT - United States - Department of Transportation**

**Shipping Name:** Environmentally Hazardous Substance, Solid, N.O.S.

**ID Number:** 3077

**Hazard Class:** 9

**Labeling Class:** 9

**Packing Group:** III

This product is regulated for transportation because it contains a reportable quantity of a hazardous substance found in Appendix A to 49 CFR 172.101. Depending on the amount of the hazardous substance present, certain package sizes may be exempt from the transport regulations and can be shipped as non-regulated materials. Please check the ingredient listing to determine if the quantity of hazardous substance present in this product would be regulated in the package size being shipped.

**Section 15 - Regulatory Information**

- SARA Hazard Classifications**   ▪ Acute  
**Risk & Safety Phrases**           ▪ R36/37/38 Irritating to eyes, respiratory system and skin.  
   S24/25 Avoid contact with skin and eyes.  
   S22 Do not breathe dust.

Inventory						
Component	CAS	Australia AICS	Canada DSL	Canada NDSL	China	EUEINECS
Sodium salt phosphoric acid (1:2)	7558-79-4	Yes	Yes	No	Yes	Yes

Inventory (Con't.)						
Component	CAS	EU ELNICS	Japan ENCS	Korea KECL	New Zealand	Philippines PICCS
Sodium salt phosphoric acid (1:2)	7558-79-4	No	Yes	Yes	Yes	Yes

Inventory (Con't.)			
Component	CAS	Switzerland SWISS	TSCA
Sodium salt phosphoric acid (1:2)	7558-79-4	No	Yes

## Australia

### Environment

**Australia - National Pollutant Inventory (NPI) Substance List**

None Listed

**Australia - Priority Existing Chemical Program**

None Listed

### Other

**The Australia Group - Export Control List - Chemical Weapons Precursors**

None Listed

## Canada

### Labor

**Canada - List of Prohibited and Restricted Cosmetic Ingredients (The Cosmetic Ingredient Hotlist)**

None Listed

**Canada - WHMIS - Classifications of Substances**

None Listed

**Canada - WHMIS - Ingredient Disclosure List**

None Listed

### Environment

**Canada - CEPA - Priority Substances List**

None Listed

## China

### Other

**China - Annex I & II - Controlled Chemicals Lists**

None Listed

**China - Dangerous Goods List**

None Listed

## Croatia

### Environment

**Croatia - Air Quality - Emission Limits for Stationary Sources**

None Listed

**Croatia - Air Quality - Limit Values for Gaseous Pollutants**

None Listed

**Croatia - Air Quality - Recommended Values for Gaseous Pollutants**

None Listed

**Croatia - Ozone Depleting Substances - Annex A, Group I**

None Listed

## Egypt

### Environment

**Egypt - Air Pollutants - Emissions Limits - Overall Particles**

None Listed

**Egypt - Air Pollutants - Maximum Limits**

None Listed

## Europe

### Environment

**EU - Substances Depleting the Ozone layer (1005/2009) - Annex I Substances**

None Listed

**EU - Seveso II Directive (96/82/EC) - Qualifying Quantities for Major Accident Notification**

None Listed

**EU - Seveso II Directive (96/82/EC) - Qualifying Quantities for Safety Report Requirements**

None Listed



## Other

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Classification

None Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Concentration Limits

None Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Labelling

None Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Notes - Substances and Preparations

None Listed

### EU - CLP (1272/2008) - Annex VI - Table 3.2 - Safety Phrases

None Listed

### EU - Hazardous Substances Restricted or Prohibited in Electrical Equipment (2002/95/EC) (RoHS)

None Listed

## India

### Environment

#### India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals

None Listed

#### India - Ozone Depleting Substances - Schedule I

None Listed

## Indonesia

### Environment

#### Indonesia - Hazardous Waste from Non-Specific Sources

None Listed

#### Indonesia - Hazardous Waste from Specific Sources

None Listed

## Japan

### Labor

#### Japan - ISHL Dangerous Substances

None Listed

#### Japan - ISHL Designated Carcinogens

None Listed

#### Japan - ISHL Harmful Substances Prohibited for Manufacture

None Listed

### Environment

#### Japan - Air Pollution Control Law - Emission Standards for Air Pollutants

None Listed

#### Inventory - Japan - Industrial Safety and Health Law Substances (ISHL)

None Listed

## Korea

### Labor

#### Korea - MOE - Harmful Substances

None Listed

#### Korea - ISHA - Name, Toxicity and Protective Measures of New Chemical Substances

None Listed

### Environment

#### Korea - MOE - Toxic Chemicals Control Act (TCCA) - Observational Chemicals

None Listed

## Malaysia

### Labor

#### Malaysia - Occupational Safety & Health - Risk Phrases

None Listed

**Malaysia - Occupational Safety & Health - Safety Phrases**

None Listed

**Environment**

**Malaysia - Clean Air Regulations - Noxious and Offensive Substances**

None Listed

**Mexico**

**Environment**

**Mexico - Pollutant Release and Transfer Register - Reporting Emissions - Threshold Quantities**

None Listed

**Other**

**Mexico - Hazard Classifications**

None Listed

**Mexico - Regulated Substances**

None Listed

**New Zealand**

**Other**

**New Zealand - Ozone Depleting Substances**

None Listed

**Other Agency Information**

**Other**

**AIHA - Emergency Response Planning Guidelines - ERPG-1 Values**

None Listed

**AIHA - Emergency Response Planning Guidelines - ERPG-2 Values**

None Listed

**AIHA - Emergency Response Planning Guidelines - ERPG-3 Values**

None Listed

**Philippines**

**Environment**

**Philippines - Ozone Depleting Substances - Annex A - Group I**

None Listed

**Other**

**Philippines - Priority Chemical List**

None Listed

**Singapore**

**Environment**

**Singapore - Air Impurities Emission Limits**

None Listed

**Singapore - List of Hazardous Substances**

None Listed

**South Africa**

**Labor**

**South Africa - General Machinery Regulations - Notifiable Substances**

None Listed

**Taiwan**

**Environment**

**Taiwan - Toxic Chemical Substances Control Act - Threshold Regulated Quantities**

None Listed

**Taiwan - Toxic Chemical Substances Control Act - Classification and Control Levels**

None Listed

## Thailand

### Labor

Thailand - Air Contaminant Standards  
None Listed

### Environment

Thailand - Quantities of Chemicals  
None Listed

### Other

Thailand - Hazardous Substances  
None Listed

## United States

### Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants  
None Listed

U.S. - CAA (Clean Air Act) - Class I Ozone Depletors  
None Listed

U.S. - CAA (Clean Air Act) - Class II Ozone Depletors  
None Listed

#### U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

- Disodium Phosphate  
Anhydrous P (Chemical Name-Sodium phosphate dibasic) 7558-79-4 5000 lb final RQ; 2270 kg final RQ
- Sodium salt  
phosphoric acid (1 7558-79-4 100% 5000 lb final RQ; 2270 kg final RQ

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs  
None Listed

U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs  
None Listed

U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing  
None Listed

U.S. - RCRA (Resource Conservation & Recovery Act) - List for Hazardous Constituents  
None Listed

U.S. - SDWA (Safe Drinking Water Act) - CCL (Contaminant Candidate List)  
None Listed

## Vietnam

### Environment

Vietnam - Air Quality - Ambient Air Quality Standards  
None Listed

Vietnam - Air Quality - Industrial Emission Standards  
None Listed

Vietnam - Air Quality - Maximum Allowable Concentration of Highly Hazardous Chemicals  
None Listed

### Other Information

- FDA Status: This product meets the compositional requirements of: 21 CFR 182.1778 SODIUM PHOSPHATE

## Section 16 - Other Information

- Preparation Date                   ▪ 5/1/2015  
Last Revision Date               ▪ 5/1/2015

**Disclaimer/Statement of Liability**

- The information herein is given in good faith but no warranty, expressed or implied, is made.

**Key to abbreviations**

NDA = No Data Available