# Material Safety Data Sheet Sodium phosphate dibasic heptahydrate

ACC# 21535

# Section 1 - Chemical Product and Company Identification

MSDS Name: Sodium phosphate dibasic heptahydrate

**Catalog Numbers:** AC206510000, AC206515000, AC424380000, AC424380250, AC424385000, S80191-4, S93411, BP331-1, BP331-500, NC9229021, NC9571000, NC9612056, NC9675626, NC9754699, S373-250LB, S373-3, S373-3LC, S373-50, S373-500, S471-10, S471-3, S471-300LB, S471-500, S471300LBLC, S4713LC, XXS471ET3KG

**Synonyms:** Sodium monohydrogen phosphate heptahydrate; phosphoric acid, disodium salt, hetahydrate; disodium phosphate heptahydrate; sodium phosphate; sodium phosphate, dibasic.

**Company Identification:** 

Fisher Scientific 1 Reagent Lane Fair Lawn, NJ 07410 For information, call: 201-796-7100

Emergency Number: 201-796-7100 For CHEMTREC assistance, call: 800-424-9300

For International CHEMTREC assistance, call: 703-527-3887

## Section 2 - Composition, Information on Ingredients

CAS#	Chemical Name	Percent	EINECS/ELINCS
7782-85-6	Disodium orthophosphate heptahydrate	100	unlisted

## Section 3 - Hazards Identification

#### **EMERGENCY OVERVIEW**

Appearance: semi-transparent crystals.

Caution! May cause eye, skin, and respiratory tract irritation. Hygroscopic (absorbs moisture from the air).

Target Organs: None.

## **Potential Health Effects**

**Eye:** May cause eye irritation. **Skin:** May cause skin irritation.

Ingestion: May cause irritation of the digestive tract. Expected to be a low ingestion hazard.

Inhalation: May cause respiratory tract irritation.

Chronic: No information found.

# Section 4 - First Aid Measures

Eyes: In case of contact, immediately flush eyes with plenty of water for a t least 15 minutes. Get medical aid.

**Skin:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists. Wash clothing before reuse.

**Ingestion:** Never give anything by mouth to an unconscious person. Get medical aid. Do NOT induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cupfuls of milk or water.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician: Treat symptomatically and supportively.

# Section 5 - Fire Fighting Measures

**General Information:** As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. During a fire, irritating and highly toxic gases may be generated by thermal decomposition or combustion.

Extinguishing Media: Substance is noncombustible; use agent most appropriate to extinguish surrounding fire.

Flash Point: Not applicable.

**Autoignition Temperature:** Not applicable. **Explosion Limits, Lower:**Not available.

Upper: Not available.

NFPA Rating: (estimated) Health: 1; Flammability: 0; Instability: 1

## Section 6 - Accidental Release Measures

**General Information:** Use proper personal protective equipment as indicated in Section 8. **Spills/Leaks:** Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing

precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

## Section 7 - Handling and Storage

**Handling:** Wash thoroughly after handling. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation. Wash clothing before reuse. **Storage:** Store in a tightly closed container. Store in a cool, dry, well-ventilated area away from incompatible substances. Store protected from moisture.

## Section 8 - Exposure Controls, Personal Protection

**Engineering Controls:** Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use adequate ventilation to keep airborne concentrations low.

**Exposure Limits** 

Chemical Name	ACGIH	NIOSH	OSHA - Final PELs
Disodium orthophosphate heptahydrate	none listed	none listed	none listed
Sodium phosphate dibasic, anhydrous	none listed	none listed	none listed

**OSHA Vacated PELs:** Disodium orthophosphate heptahydrate: No OSHA Vacated PELs are listed for this chemical. Sodium phosphate dibasic, anhydrous: No OSHA Vacated PELs are listed for this chemical.

**Personal Protective Equipment** 

**Eyes:** 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:** Wear appropriate protective gloves to prevent skin exposure.

Clothing: Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** 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 if irritation or other symptoms are experienced.

## Section 9 - Physical and Chemical Properties

Physical State: Crystals

Appearance: white - semi-transparent

Odor: none reported

pH: 8.7-9.8 (5% aq. soln. at 25°C)
Vapor Pressure: Not available.
Vapor Density: Not available.
Evaporation Rate:Not applicable.
Viscosity: Not available.
Boiling Point: Not applicable.
Freezing/Melting Point:48 deq C

**Decomposition Temperature:** Not available.

**Solubility:** 154 g/l (20 C)

Specific Gravity/Density:1.6790 Molecular Formula:HNa2O4P.7H2O

Molecular Weight: 268.07

## Section 10 - Stability and Reactivity

**Chemical Stability:** Stable at room temperature in closed containers under normal storage and handling conditions. Hygroscopic: absorbs moisture or water from the air.

Conditions to Avoid: Incompatible materials, excess heat, exposure to moist air or water.

 $\textbf{Incompatibilities with Other Materials:} \ \textbf{Strong acids}.$ 

**Hazardous Decomposition Products:** Oxides of phosphorus, sodium oxide.

Hazardous Polymerization: Has not been reported.

# Section 11 - Toxicological Information

RTECS#:

**CAS#** 7782-85-6: WC4600000 **CAS#** 7558-79-4: WC4500000

**LD50/LC50:** CAS# 7782-85-6:

Oral, rat: LD50 = 12930 mg/kg;

CAS# 7558-79-4:

Draize test, rabbit, eye: 500 mg/24H Mild; Draize test, rabbit, skin: 500 mg/24H Mild;

Oral, rat: LD50 = 17 gm/kg;

Carcinogenicity:

CAS# 7782-85-6: Not listed by ACGIH, IARC, NTP, or CA Prop 65. CAS# 7558-79-4: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

Epidemiology: No information found Teratogenicity: No information found Reproductive Effects: No information found Mutagenicity: No information found Neurotoxicity: No information found

Other Studies:

## Section 12 - Ecological Information

No information available.

# Section 13 - Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

RCRA P-Series: None listed. RCRA U-Series: None listed.

# Section 14 - Transport Information

	US DOT	Canada TDG
Shipping Name:	Not Regulated	Not Regulated
Hazard Class:		
UN Number:		
Packing Group:		

# Section 15 - Regulatory Information

#### **US FEDERAL**

#### **TSCA**

CAS# 7782-85-6 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3(u)(2)).

CAS# 7558-79-4 is listed on the TSCA inventory.

## **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### Section 12b

None of the chemicals are listed under TSCA Section 12b.

#### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

#### **CERCLA Hazardous Substances and corresponding RQs**

CAS# 7558-79-4: 5000 lb final RQ; 2270 kg final RQ

### SARA Section 302 Extremely Hazardous Substances

None of the chemicals in this product have a TPQ.

**Section 313** No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depletors.

This material does not contain any Class 2 Ozone depletors.

#### **Clean Water Act:**

CAS# 7558-79-4 is listed as a Hazardous Substance under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### STATE

CAS# 7782-85-6 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 7558-79-4 can be found on the following state right to know lists: California, New Jersey, Pennsylvania, Massachusetts.

#### California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

#### **European/International Regulations**

**European Labeling in Accordance with EC Directives** 

## **Hazard Symbols:**

Not available.

**Risk Phrases:** 

#### **Safety Phrases:**

S 24/25 Avoid contact with skin and eyes.

#### WGK (Water Danger/Protection)

CAS# 7782-85-6: No information available.

CAS# 7558-79-4: 1

#### Canada - DSL/NDSL

CAS# 7558-79-4 is listed on Canada's DSL List.

# Canada - WHMIS

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

## **Canadian Ingredient Disclosure List**

# Section 16 - Additional Information

**MSDS Creation Date:** 7/12/1999 **Revision #4 Date:** 6/19/2006

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no event shall Fisher be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Fisher has been advised of the possibility of such damages.