

## SAFETY DATA SHEET

Preparation Date: 09/07/2017

Revision date 5/2/2019

Revision Number: G2

### 1. IDENTIFICATION

#### Product identifier

**Product code:** S1420  
**Product Name:** SODIUM PYROPHOSPHATE, DECAHYDRATE, CRYSTAL, REAGENT, ACS

#### Other means of identification

**Synonyms:** Pyrophosphoric acid, tetrasodium salt, decahydrate  
 Sodium pyrophosphate decahydrate  
 Diphosphoric acid, tetrasodium salt, decahydrate  
 Tetrasodium pyrophosphate, decahydrate  
 Sodium pyrophosphate tetrabasic decahydrate

**CAS #:** 13472-36-1  
**RTECS #** Not available  
**CI#:** Not available

#### Recommended use of the chemical and restrictions on use

**Recommended use:** No information available.  
**Uses advised against** No information available

**Supplier:** Spectrum Chemical Mfg. Corp  
 14422 South San Pedro St.  
 Gardena, CA 90248  
 (310) 516-8000

**Order Online At:** <https://www.spectrumchemical.com>  
**Emergency telephone number** Chemtrec 1-800-424-9300  
**Contact Person:** Tom Tyner (USA - West Coast)  
**Contact Person:** Ibad Tirmiz (USA - East Coast)

### 2. HAZARDS IDENTIFICATION

#### Classification

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Considered a dangerous substance or mixture according to the Globally Harmonized System (GHS)

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Specific target organ toxicity (single exposure)	Category 3

#### Label elements

##### **Warning**

**Hazard statements**  
 Causes serious eye irritation

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Causes skin irritation  
May cause respiratory irritation



**Hazards not otherwise classified (HNOC)**

Not Applicable

**Other hazards**

Not available

**Precautionary Statements - Prevention**

Wash face, hands and any exposed skin thoroughly after handling  
Avoid breathing dust/fume/gas/mist/vapors/spray  
Use only outdoors or in a well-ventilated area  
Wear protective gloves  
Wear eye/face protection

**Precautionary Statements - Response**

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 attention.  
IF ON SKIN: Wash with plenty of water  
If skin irritation occurs: Get medical attention  
Take off contaminated clothing and wash it before reuse  
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep container tightly closed  
Store locked up

**Precautionary Statements - Disposal**

Dispose of contents and container to an approved waste disposal plant in accordance with local, regional, national and international regulations as applicable

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Component	CAS No	Weight-%
Sodium Pyrophosphate, Decahydrate	13472-36-1	100

**4. FIRST AID MEASURES**

**First aid measures**

**General Advice:**

National Capital Poison Center in the United States can provide assistance if you have a poison emergency and need to talk to a poison specialist. Call 1-800-222-1222.

**Skin Contact:**

Wash off immediately with soap and plenty of water removing all contaminated clothing and shoes. Get medical attention. If skin irritation persists, call a physician.

**Eye Contact:** Flush eyes with water for 15 minutes. Get medical attention.

**Inhalation:** Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

**Ingestion:** Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Obtain medical attention.

**Most important symptoms and effects, both acute and delayed**

**Symptoms** Causes serious eye irritation  
Inflammation of the eye is characterized by redness, watering and itching  
Causes skin irritation  
Irritating to respiratory system

**Indication of any immediate medical attention and special treatment needed**

**Notes to Physician:** Treat symptomatically.

**Protection of first-aiders**

First-Aid Providers: Avoid exposure to blood or body fluids. Wear gloves and other necessary protective clothing. Dispose of contaminated clothing and equipment as bio-hazardous waste.

**5. FIRE-FIGHTING MEASURES**

**Extinguishing Media**

**Suitable Extinguishing Media:** The product is not flammable. If it is involved in a fire, extinguish the fire using an agent suitable for the type of surrounding fire.

**Unsuitable Extinguishing Media:** No information available.

**Specific hazards arising from the chemical**

**Hazardous combustion products** If it is involved in a fire the following can be released:  
Oxides of phosphorus. Sodium oxides.

**Specific hazards** No information available.

**Special Protective Actions for Firefighters**

**Specific Methods:** No information available

**Special Protective Equipment for Firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear

## 6. ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

**Personal Precautions:** Ensure adequate ventilation. Keep people away from and upwind of spill/leak. Avoid contact with skin, eyes and clothing. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Use personal protective equipment.

**Environmental precautions** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Prevent entry into waterways, sewers, basements or confined areas.

### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Cover with plastic sheet to prevent spreading.

**Methods for cleaning up** Use appropriate tools to put the spilled solid in a suitable waste disposal container. Clean contaminated surface thoroughly.

## 7. HANDLING AND STORAGE

### Precautions for safe handling

#### **Technical Measures/Precautions:**

Provide sufficient air exchange and/or exhaust in work rooms. Avoid dust formation. Keep away from incompatible materials.

#### **Safe Handling Advice**

Wear personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe dust. Do not ingest. Handle in accordance with good industrial hygiene and safety practice.

### Conditions for safe storage, including any incompatibilities

#### **Technical Measures/Storage Conditions:**

Keep container tightly closed in a dry and well-ventilated place. Store at room temperature in the original container. Store away from incompatible materials.

#### **Incompatible Materials:**

Oxidizing agents  
Acids

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### Control parameters

#### **National occupational exposure limits**

##### **United States**

Component	CAS No	OSHA	NIOSH	ACGIH	AIHA WEEL
Sodium Pyrophosphate, Decahydrate	13472-36-1	None	None	None	None

##### **Canada**

Component	CAS No	Canada - Alberta	Canada - British Columbia	Canada - Ontario	Canada - Quebec
Sodium Pyrophosphate, Decahydrate	13472-36-1	None	None	None	None

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## Australia and Mexico

Component	CAS No	Australia	Mexico
Sodium Pyrophosphate, Decahydrate	13472-36-1	None	None

### Appropriate engineering controls

**Engineering measures to reduce exposure:** Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

### Individual protection measures, such as personal protective equipment

#### Personal Protective Equipment

**Eye protection:** Safety glasses with side-shields. or Goggles

**Skin and body protection:** Long sleeved clothing  
Chemical resistant apron  
Gloves

**Respiratory protection:** Effective dust mask. or. Wear respirator with dust filter. Use a dust respirator under conditions where exposure to the substance is apparent (e.g. generation of high concentration of dust (dust clouds) , inadequate ventilation, development of respiratory tract irritation), and engineering controls are not feasible. Be sure to use an approved/certified respirator or equivalent.

**Hygiene measures:** Avoid contact with skin, eyes and clothing. When using, do not eat, drink or smoke. Wash hands before breaks and immediately after handling the product

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical state:</b> Solid	<b>Appearance:</b> Crystals.	<b>Color:</b> Colorless.
<b>Odor:</b> Odorless.	<b>Taste</b> Alkaline.	<b>Formula</b> Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> ·10H <sub>2</sub> O
<b>Molecular/Formula weight (g/mole):</b> 446.06	<b>Flammability (solid, gas)</b> Non-flammable	<b>Flashpoint (°C/°F):</b> No information available
<b>Flash Point Tested according to:</b> Not available	<b>Autoignition Temperature (°C/°F):</b> No information available	<b>Lower Explosion Limit (%):</b> No information available
<b>Upper Explosion Limit (%):</b> No information available	<b>Melting point/range(°C/°F):</b> 79.5°C/ 175.1°F	<b>Decomposition temperature(°C/°F):</b> No information available
<b>Boiling point/range(°C/°F):</b> No information available	<b>Bulk density:</b> No information available	<b>Density (g/cm<sup>3</sup>):</b> No information available
<b>Specific gravity:</b> 1.82	<b>pH</b> 10.2 (1% solution at 25°C)	<b>Vapor pressure @ 20°C (kPa):</b> No information available

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**Evaporation rate:**  
No information available

**Vapor density:**  
No information available

**VOC content (g/L):**  
No information available

**Odor threshold (ppm):**  
No information available

**Partition coefficient  
(n-octanol/water):**  
No information available

**Viscosity:**  
No information available

**Miscibility:**  
No information available

**Solubility:**  
Soluble in Water  
Insoluble in Alcohol  
Solubility in Water: 3.16 g/100 ml @  
0°C; 6.23 g/ml @ 20°C.; 8.14 g/100 ml  
@ 25°C; 21.83 g/100 ml @ 60°C.;  
30.04 g/100 ml @ 80°C

## 10. STABILITY AND REACTIVITY

### Reactivity

Reactive with oxidizing agents  
Reactive with acids

### Chemical stability

**Stability:** Stable under recommended storage conditions.

**Possibility of Hazardous Reactions:** Hazardous polymerization does not occur

**Conditions to avoid:** Incompatible materials. Avoid dust formation.

**Incompatible Materials:** Oxidizing agents  
Acids

**Hazardous decomposition products:** Oxides of potassium. Sodium oxides.

### Other Information

**Corrosivity:** Non-corrosive in the presence of glass

**Special Remarks on Corrosivity:** No information available

## 11. TOXICOLOGICAL INFORMATION

### Information on likely routes of exposure

**Principal Routes of Exposure:**  
Skin. Inhalation. Ingestion.

### Acute Toxicity

### Component Information

Sodium Pyrophosphate, Decahydrate

CAS No | 13472-36-1

**LD50/oral/rat =** No information available

**LD50/oral/mouse =** No information available

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LD50/dermal/rabbit = No information available  
LD50/dermal/rat = No information available  
LC50/inhalation/rat = No information available  
LC50/inhalation/mouse = No information available  
Other LD50 or LC50 information = 4000 mg/kg oral LD50 Rat (for Sodium Pyrophosphate anhydrous CAS no. 7722-88-5)  
2980 mg/kg oral LD50 Mouse (for Sodium Pyrophosphate anhydrous CAS no. 7722-88-5)

## Product Information

LD50/oral/rat =  
Value - Acute Tox = No information available

LD50/oral/mouse =  
Value - Acute Tox Oral = No information available

LD50/dermal/rabbit  
Value - Acute Tox = No information available

LD50/dermal/rat  
VALUE - Acute Tox Dermal = No information available

LC50/inhalation/rat  
VALUE-Vapor = No information available  
VALUE-Gas = No information available  
VALUE-Dust/Mist = No information available

LC50/Inhalation/mouse  
VALUE-Vapor = No information available  
VALUE - Gas = No information available  
VALUE - Dust/Mist = No information available

## Symptoms

<b>Skin Contact:</b>	Causes skin irritation. Mildly to moderately irritating to the skin.
<b>Eye Contact:</b>	Causes serious eye irritation. Moderately irritating to the eyes. Symptoms may include stinging, tearing, redness.
<b>Inhalation</b>	May cause respiratory tract irritation. Symptoms may include chest tightness, coughing. May cause dyspnea (difficulty breathing or shortness of breath).
<b>Ingestion</b>	Causes gastrointestinal (digestive) tract irritation with nausea, vomiting, and diarrhea. Phosphates are slowly and incompletely absorbed when ingested, and seldom result in systemic effects. Symptoms may include vomiting, diarrhea, lethargy, blood chemistry effects (metabolic acidosis, hypocalcemia), heart disturbances, and central nervous system effects. The toxicity of phosphates is due to their ability to sequester calcium.
<b>Aspiration hazard</b>	No information available.

## Delayed and immediate effects as well as chronic effects from short and long-term exposure

<b>Chronic Toxicity</b>	Chronic ingestion or inhalation may induce systemic phosphate poisoning. Liver damage, kidney damage, jaw/tooth abnormalities, blood disorders and cardiovascular effects may results. Prolonged or repeated skin contact may cause
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drying or chapping of skin. Medical Conditions Aggravated by Exposure: Persons with pre-existing skin disorders or eye problems, jaw/tooth abnormalities, or impaired liver, kidney or respiratory function may be more susceptible to the effects of this substance.

**Sensitization:** No information available.

**Mutagenic Effects:** No information available

**Carcinogenic effects:** Not considered carcinogenic.

Component	CAS No	IARC	ACGIH - Carcinogens	NTP	OSHA HCS - Carcinogens	Australia - Notifiable Carcinogenic Substances	Australia - Prohibited Carcinogenic Substances
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not listed	Not listed	Not listed	Not listed	Not listed	Not listed

*ACGIH (American Conference of Governmental Industrial Hygienists)*

*IARC (International Agency for Research on Cancer)*

*NTP (National Toxicology Program)*

*OSHA (Occupational Safety and Health Administration of the US Department of Labor)*

**Reproductive toxicity** No data is available

**Reproductive Effects:** No information available

**Developmental Effects:** No information available

**Teratogenic Effects:** No information available

**Specific Target Organ Toxicity**

**STOT - single exposure** No information available.

**STOT - repeated exposure** No information available.

**Target Organs:** Kidneys. Liver.

**12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Ecotoxicity effects:** No data available.

**Persistence and degradability:** No information available

**Bioaccumulative potential:** No information available.

**Mobility in soil** No information available

**Other adverse effects** No information available.

**13. DISPOSAL CONSIDERATIONS**

**Disposal Methods**

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**Waste from residues / unused products:**

Waste must be disposed of in accordance with Federal, State and Local regulation.

**Contaminated packaging:**

Empty containers should be taken for local recycling, recovery or waste disposal

Component	CAS No	RCRA - F Series Wastes	RCRA - K Series Wastes	RCRA - P Series Wastes	RCRA - U Series Wastes
Sodium Pyrophosphate, Decahydrate	13472-36-1	None	None	None	None

**14. TRANSPORT INFORMATION****DOT**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Class** No information available  
**Packing group:** No information available  
**Emergency Response Guide Number** No information available  
**Marine Pollutant** No data available  
**DOT RQ (lbs):** No information available  
**Special Provisions** No Information available  
**Symbol(s):** No information available  
**Description:** No information available

**TDG (Canada)**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No Information available  
**Description:** No information available

**ADR**

**UN Number** Not regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Packing group** No information available  
**Subsidiary Risk:** No information available

**IMDG**

**UN-No:** Not Regulated  
**Proper Shipping Name:** No information available  
**Hazard Class:** No information available  
**Subsidiary Risk:** No information available  
**Packing Group:** No information available  
**Marine Pollutant** No information available

**RID**

**UN Number** Not Regulated  
**Proper Shipping Name:** No information available  
**Transport hazard class(es)** No information available  
**Subsidiary Risk:** No information available

Packing group No information available

**ICAO (air)**

UN-No: Not Regulated  
Proper Shipping Name: No information available  
Hazard Class No information available  
Subsidiary Risk: No information available  
Packing Group: No information available

**IATA**

UN Number Not Regulated  
Proper Shipping Name: No information available  
Transport hazard class(es) No information available  
Subsidiary Risk: No information available  
Packing group No information available  
Precautionary Statements - Response No information available  
Special Provisions No information available

**15. REGULATORY INFORMATION**

**International Inventories**

Component	CAS No	U.S. TSCA	KOREA KECL	Philippines (PICCS)	Japan ENCS	China IECSC	Australia (AICS)	EINECS-No.
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not Listed	Not present	Present	Present (1)-497	Present	Present	Not present

**U.S. Regulations**

**California Prop. 65: Safe Drinking Water and Toxic Enforcement Act of 1986.**

**Chemicals Known to the State of California to Cause Cancer:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

**Chemicals Known to the State of California to Cause Reproductive Toxicity:**

This product does not contain a chemical requiring a warning under California Prop. 65. (See table below)

Component	CAS No	Carcinogen	Developmental Toxicity	Male Reproductive Toxicity	Female Reproductive Toxicity:
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not Listed	Not Listed	Not Listed	Not Listed

**CERCLA/SARA**

Component	CAS No	CERCLA - Hazardous Substances and their Reportable Quantities	Section 302 Extremely Hazardous Substances and TPQs	Section 302 Extremely Hazardous Substances and RQs	Section 313 - Chemical Category	Section 313 - Reporting de minimis
Sodium Pyrophosphate, Decahydrate	13472-36-1	None	None	None	None	None

**U.S. TSCA**

Component	CAS No	TSCA Section 5(a)2 - Chemicals With Significant New Use Rules (SNURS)	TSCA 8(d) -Health and Safety Reporting
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not Applicable	Not Applicable

## Canada

### WHMIS 2015 - GHS Classifications

WHMIS 2015 Hazard Classification Information:

Component  
Sodium Pyrophosphate, Decahydrate  
13472-36-1 ( 100 )

WHMIS 2015 Hazard Classification  
Serious eye damage/eye irritation - Category 2; Causes serious eye irritation (H319)

**Canada Hazardous Products Regulation** This product has been classified according to the hazard criteria of the HPR (Hazardous Products Regulation) and the SDS contains all of the information required by the HPR

### DSL/NDSL

Component	CAS No	Canada (DSL)	Canada (NDSL)
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not Listed	Not Listed

Component	CAS No	CEPA Schedule I - Toxic Substances
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not listed
Component	CAS No	CEPA - 2010 Greenhouse Gases Subject to Mandatory Reporting
Sodium Pyrophosphate, Decahydrate	13472-36-1	Not listed

### EU Classification

#### EU GHS - SV - CLP 1272/2008

Component	CAS No	EU GHS - SV - CLP (1272/2008)
Sodium Pyrophosphate, Decahydrate	13472-36-1	

#### EU - CLP (1272/2008)

### R-phrase(s)

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

### S -phrase(s)

S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

S36/37/39 - Wear suitable protective clothing, gloves and eye/face protection

Component	CAS No	Classification	Concentration Limits:	Safety Phrases
Sodium Pyrophosphate, Decahydrate	13472-36-1		No information	

**The product is classified in accordance with Annex VI to Directive 67/548/EEC**

### Indication of danger:

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Xi - Irritant

Xi



## 16. OTHER INFORMATION

**Preparation Date:** 09/07/2017  
**Revision date** 5/2/2019  
**Prepared by:** Sonia Owen

**Disclaimer:**

All chemicals may pose unknown hazards and should be used with caution. This Safety Data Sheet (SDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this SDS. The physical properties reported in this SDS are obtained from the literature and do not constitute product specifications. Information contained herein does not constitute a warranty, whether expressed or implied, as to the safety, merchantability or fitness of the goods for a particular purpose. Spectrum Chemicals & Laboratory Products, Inc. assumes no responsibility for results obtained or for incidental or consequential damages, including lost profits, arising from the use of these data. No warranty against infringement of any patent, copyright or trademark is made or implied. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this SDS is based on technical data judged to be reliable, Spectrum assumes no responsibility for the completeness or accuracy of the information contained herein.

**End of Safety Data Sheet**