



# Safety Data Sheet



## 1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY UNDERTAKING

### Identification

Product Name Sodium Hexametaphosphate (SHMP)  
Reference Number AST10053  
Date May 18, 2015  
Synonyms: Glass H, Hexaphos, Sodaphos, SHMP; glassy Sodium Phosphate; Sodium Polyphosphate, glassy; Metaphosphoric Acid, Sodium Salt; P60; Graham's Salt.

### Use of the substance or preparation

Food Ingredient

### Company Information:

#### 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

### GHS

This product does not meet the criteria for classification under GHS

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Composition

<u>Substance</u>	<u>CAS No.</u>	<u>EINECS No.</u>	<u>%w/w</u>	<u>Risk Phrase</u>
Sodium Hexametaphosphate (Polyphosphoric acids, sodium salts)	68915-31-1	272-808-3	100	R36/37/38

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**4. FIRST AID MEASURES**

**General**

This product has low oral toxicity and is minimally irritating to the skin and eyes. Treatment is controlled removal of exposure and symptomatic and supportive care.

**Eye contact**

Rinse immediately with plenty of water. Get medical attention if irritation occurs and persists. The dry material may cause foreign body irritation in some individuals.

**Skin contact**

Wash with plenty of water. Prolonged contact with the dry material may cause drying or chapping of the skin.

**Inhalation**

Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Inhalation of the dust may cause coughing and sneezing.

**Ingestion**

Drink plenty of water. Never give anything by mouth to an unconscious person. No significant adverse health effects are expected if only small amount (less than a mouthful) are swallowed.

**5. FIRE FIGHTING MEASURES**

**Extinguishing media**

Non-combustible. No special requirement.

**Unsuitable extinguishing 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**

No special requirement.

**Environmental precautions**

Small quantities: Presents no environmental problems.

Large quantities: As general precaution, avoid discharge into the environment.

**Methods for cleaning up**

Sweep, scoop or vacuum and place into containers for disposal. Flush area with water.

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### 7. HANDLING AND STORAGE

#### Handling

Good industrial practice in housekeeping and personal hygiene should be followed. Avoid contact with eyes and skin. Wash hands immediately after handling. Remove material from clothing.

#### Engineering measures

Prevention of eye and skin contact may be required under normal use conditions. However, severe agitation or dispersion into the work environment may require enclosure of the process and local exhaust ventilation at the source to prevent release into the air. If the work environment controls are not implemented, then personal protection for inhalation, skin and eye may be required.

#### Storage

Store in cool, dry place to maintain product performance.

### 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

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

In case of insufficient ventilation, wear suitable respiratory equipment. Use approved respiratory protective equipment as described in the U.S. OSHA 29 CFR 1910.134 or European Standard EN149.

#### Hand/skin protection

Wearing protective clothes is recommended; wash hand and contaminated skin thoroughly after handling.

#### Eye protection

Wear appropriate protective eye glasses or chemical safety goggles as described in the U.S. OSHA 29 CFR 1910.133 or European Standard EN 166.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- a. Appearance (physical state, color etc.): White powder, free flowing
- b. Odor: Odorless
- c. Odor Threshold – No data
- d. pH: 5.6 – 8.8 at 1% solution
- e. Melting point/freezing point: 628 °C or 1162 °F
- f. Initial Boiling point and Boiling Range: 1500 °C or 2732 °F
- g. Flash Point: Not applicable
- h. Evaporation rate: No Data
- i. Flammability (solid or Gas): Not applicable
- j. Upper/lower flammability or explosive limits: Not applicable
- k. Vapor Pressure: No Data

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- l. Vapor Density: No Data
- m. Relative Density: 500 kg/m<sup>3</sup> - 1000 kg/m<sup>3</sup>
- n. Solubility: <750g/l
- o. Partition Coefficient: No Data
- p. Auto-ignition temperature: No Data
- q. Decomposition Temperature: No Data
- r. Viscosity: No Data
- s. Chemical Formula: Na<sub>2</sub>O P<sub>2</sub>O<sub>5</sub>

### 10. STABILITY AND REACTIVITY

Solutions of this product will hydrolyze to form ortho-phosphate and other shorter chain phosphates. Dissolution is impacted by temperature and pH of the system.

#### Conditions to avoid

Excessive moisture.

#### Materials to avoid

No special material to avoid.

#### Hazardous decomposition products

Oxides of phosphorus

### 11. TOXICOLOGICAL INFORMATION

#### Laboratory data

Oral LD <sub>50</sub> (rat):	6600 mg/kg.
Dermal LD <sub>50</sub> (rabbit):	> 7940 mg/kg.
Eye Irritation (rabbit):	1.3/110.0; slightly irritating
Skin irritation (rabbit):	0.0/8.0, nonirritating

Rats fed this material in their diet for one month showed decreased growth, increased kidney, lung and spleen weight, and kidney damage. Rats fed this material for two years also showed decreased weight gain, increased kidney weight, and kidney changes. No increase in tumors was reported. No adverse effects in reproduction capacity were reported in a multigenerational study using rats fed this material.

### 12. ECOLOGICAL INFORMATION

#### Environmental Toxicity

The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity

48-hr EC <sub>50</sub> Daphnia magna	> 485 mg/l
96-hr LC <sub>50</sub> Rainbow trout	> 1000 mg/l
96-hr LC <sub>50</sub> Medina & Mysid shrimp	> 1000 mg/l

#### 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

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**European waste catalog number**

Unknown

**Disposal Considerations**

This material when discarded is not a hazardous waste as that term is defined by the U.S. Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. 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****Road/Rail, Sea and Air**

IMDG/UN	Not classified
ICAO/IATA	Not classified
RID/ADR	Unknown
Canadian TDG	Not classified
U.S. DOT	Not classified

**15. REGULATORY INFORMATION****Chemical Inventory**

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

**Additional information**

WHMIS Classification Not Controlled

**SARA Hazard Notification**

Hazard Categories Under Title III Rules (40 CFR 370): Immediate, Delayed

Section 302 Extremely Hazardous Substances: None

Section 313 Toxic Chemical(s): None

CERCLA Reportable Quantity: Not applicable

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

**16. OTHER INFORMATION**

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating	1	0	0	F F = Safety glasses, gloves, synthetic apron, dust respirator

Reason for revision: Converted to SDS format. Supersedes MSDS dated: February 6, 2015

Drafted in accordance with ECC Dir 2001/58/EC

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