

## Univar USA Inc Material Safety Data Sheet

Univar USA Inc., 17425 NE Union Hill Rd., Redmond WA 98052 (425) 889 3400

**Emergency Assistance** 

For emergency assistance involving chemicals call Chemtrec - (800) 424-9300

# ICL Performance Products LP

# Material Safety Data Sheet



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

#### **Identification**

Product Name Sodium Hexametaphosphate (SHMP)

Reference Number AST10053 Date July 23, 2010

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

In Canada call CANUTEC: 1 613 996 6666

General Information: +1 800 244 6169 (Worldwide)

#### 2. COMPOSITION/INFORMATION ON INGREDIENTS

#### Composition

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

#### 3. HAZARDS IDENTIFICATION

#### Classification of the substance/preparation

EC Classification None Safety phrase S26 S36

#### **Human Health Effects**

May cause skin, eye and respiratory tract irritation.

Material: Sodium Hexametaphosphate

Page 2 of 6 Reference No.: AST10053 July 23, 2010

#### **Environmental Effects**

On the basis of available information, this material is not expected to produce any significant environmental effects when recommended use instructions are followed.

#### 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

Material: Sodium Hexametaphosphate Page 3 of 6
Reference No.: AST10053 July 23, 2010

#### **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.

#### 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 is 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.

Material: Sodium Hexametaphosphate Page 4 of 6
Reference No.: AST10053 July 23, 2010

#### 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

#### **General Information**

Chemical Formula: Na<sub>2</sub>O P<sub>2</sub>O<sub>5</sub>

Form powder, free flowing

Color White Odor Odorless

#### Important health, safety and environmental information

pH (1% solution): 5.6 - 8.8

Water solubility: < 750 g/l (partly soluble)

Melting point: 628 °C or 1162 °F

Boiling point: 1500 °C or 2732 °F

Bulk density: 500 kg/m³ - 1000 kg/m³

#### Oher Information

Miscibility with water < 750g/l
Flash point: not applicable
Lower/upper explosion limits: not applicable
Minimum ignition temperature: not applicable

#### 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

Material: Sodium Hexametaphosphate Page 5 of 6
Reference No.: AST10053 July 23, 2010

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.

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

#### 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 $_{50}$  Daphnia magna > 485 mg/l 96-hr LC $_{50}$  Rainbow trout > 1000 mg/l 96-hr LC $_{50}$  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

#### 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/UNNot classifiedICAO/IATANot classifiedRID/ADRUnknownCanadian TDGNot classifiedU.S. DOTNot classified

#### 15. REGULATORY INFORMATION

#### <u>EC label</u>

Hazard symbol: none

Material: Sodium Hexametaphosphate Page 6 of 6 Reference No.: AST10053 July 23, 2010

Risk phrase R36/37/38 – irritating to eyes, respiratory system and skin.

Safety phrase S26 – In case of contact with eyes, immediately flush with plenty

of water and seek medical attention S36 – Wear suitable protective clothing

#### **Chemical Inventory**

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

#### 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: Revised sections 1, 9. Drafted in accordance with ECC Dir 2001/58/EC

Supersedes MSDS dated: June 2, 2009

Responsible Care ® is a registered trademark of the American Chemistry Council.

Although the information and recommendations set forth herein (hereinafter "Information") are presented in good faith and believed to be correct as of the date hereof, ICL Performance Products LP makes no representations as to the completeness or accuracy thereof. Information is supplied upon the condition that the persons receiving same will make their own determination as to its suitability for their purposes prior to use. In no event will ICL Performance Products LP be responsible for damages of any nature whatsoever resulting from the use of or reliance upon information. NO REPRESENTATIONS OR WARRANTIES, EITHER EXPRESS OR IMPLIED, OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR OF ANY OTHER NATURE ARE MADE HEREUNDER WITH RESPECT TO INFORMATION OR THE PRODUCT TO WHICH INFORMATION REFERS

### Univar USA Inc Material Safety Data Sheet

For Additional Information contact MSDS Coordinator during business hours, Pacific time: (425) 889-3400

#### **Notice**

Univar USA Inc. ("Univar") expressly disclaims all express or implied warranties of merchantability and fitness for a particular purpose, with respect to the product or information provided herein, and shall under no circumstances be liable for incidental or consequential damages.

Do not use ingredient information and/or ingredient percentages in this MSDS as a product specification. For product specification information refer to a product specification sheet and/or a certificate of analysis. These can be obtained from your local Univar sales office.

All information appearing herein is based upon data obtained from the manufacturer and/or recognized technical sources. While the information is believed to be accurate, Univar makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Univar's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product, or from the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or in any other process