Safety Data Sheet

Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name: Sodium Hexametaphosphate Food Grade
Synonyms:
- Graham’s Salt
- Sodium Polymetaphosphate
- Sodium Polyphosphates Glassy
- Vitrafos
CAS Number: 68915-31-1
SDS Number/Grade: 1a
EC Number: 272-808-3
REACH Pre-Registration Number: 05-2118797653-24-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s):

1.3 Details of the supplier of the safety data sheet

Manufacturer: Innophos
259 Prospect Plains Rd. Bldg A
Cranbury, NJ 08512-3706
United States
Telephone (Technical): 609-495-2495

1.4 Emergency telephone number

Manufacturer:
- 800-424-9300 - Chemtrec - within USA and Canada
- +1 703-527-3887 - Chemtrec - outside USA and Canada (collect calls accepted)
- 615-386-7816 - Innophos Emergency Communication Team (ECT)

Section 2: Hazards Identification

EU/EEC
According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP: Not classified
DSD/DPD: Not classified

2.2 Label Elements
United States (US)
According to OSHA 29 CFR 1910.1200 HCS

2.3 Other Hazards
CLP
According to Regulation (EC) No. 1272/2008 (CLP) this material is not considered hazardous.
DSD/DPD
This product is not considered dangerous under the European Directive 67/548/EEC.

Canada
According to WHMIS

2.3 Other hazards
OSHA HCS 2012
This product is not considered hazardous under the U.S. OSHA 29 CFR 1910.1200 Hazard Communication Standard.

Section 3 - Composition/Information on Ingredients

3.1 Substances

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Identifiers</th>
<th>%</th>
<th>LD50/LC50</th>
<th>Classifications According to Regulation/Directive</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polyphosphoric acids, sodium salts</td>
<td>CAS:68915-31-1 EC Number:272-808-3</td>
<td>100%</td>
<td>Ingestion/Oral-Rat LD50: 3053 mg/kg</td>
<td>EU DSD/DPD: Not classified EU CLP: Not classified OSHA HCS 2012: Not classified</td>
<td>NDA</td>
</tr>
</tbody>
</table>

3.2 Mixtures
Material does not meet the criteria of a mixture in accordance with Regulation (EC) No 1272/2008.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation
- Move victim to fresh air. Give artificial respiration if victim is not breathing. Administer oxygen if breathing is difficult. If signs/symptoms continue, get medical attention.

Skin
- IF ON SKIN: Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Remove clothing and wash thoroughly before use.

Eye
- In case of contact with substance, immediately flush eyes with running water for at least 15 minutes. If eye irritation persists: Get medical advice/attention.

Ingestion
- If victim is conscious and alert, give 2-3 glasses of water to drink. Induce vomiting by touching back of throat with a finger. Do not give anything by mouth to an unconscious person. Seek immediate medical attention. Do not leave victim unattended. Vomiting may occur spontaneously. To prevent aspiration of swallowed product, lay victim on side with head lower than waist. If vomiting occurs and the victim is conscious, give water to further dilute the chemical.

4.2 Most important symptoms and effects, both acute and delayed
- Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician
- 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.

4.4 Other information
- Call 911 or emergency medical service. Ensure that medical personnel are aware of the material(s) involved and take precautions to protect themselves.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media
- Not combustible. Use extinguishing media suitable for surrounding fire.

Unsuitable Extinguishing Media
- None known.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards
- Non-combustible.

Hazardous Combustion Products
- None known.

5.3 Advice for firefighters
- Wear positive pressure self-contained breathing apparatus (SCBA). Structural firefighters’ protective clothing will only provide limited protection.
- LARGE FIRES: Move containers from fire area if you can do it without risk.
- LARGE FIRES: Do not scatter spilled material with high pressure water streams.
- LARGE FIRES: Dike fire-control water for later disposal.

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal Precautions

- Do not touch or walk through spilled material.

Emergency Procedures

- Keep unauthorized personnel away.

6.2 Environmental precautions

- Runoff from fire control or dilution water may cause pollution. Spills may be reportable to the National Response Center (800-424-8802) and to state and/or local agencies.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

- Sweep or vacuum up and place in an appropriate closed container.
- Avoid dispersal of dust in the air.
- LARGE SPILLS: Cover powder spill with plastic sheet or tarp to minimize spreading.

6.4 Reference to other sections

- Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

- Avoid direct or prolonged contact with skin and eyes. Avoid breathing dust. Keep containers closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities

Storage

- Store in an area that is cool and dry.

7.3 Specific end use(s)

- Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines

- No exposure limits were found for this product or any of its ingredients.

8.2 Exposure controls

Engineering Measures/Controls

- Dilution ventilation. Adequate ventilation systems as needed to control concentrations of airborne contaminants below applicable threshold limit values.

Personal Protective Equipment

Respiratory

- 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.

Eye/Face

- Wear eye protection.

Hands

- Wear appropriate gloves.

Skin/Body

- Wear long sleeves and/or protective coveralls.

General Industrial Hygiene Considerations

- Wash hands before eating.

Environmental Exposure Controls

- Follow best practice for site management and disposal of waste.

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties
### Material Description

<table>
<thead>
<tr>
<th>Physical Form</th>
<th>Solid</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance/Description</td>
<td>White powder, granules or glass plates with no odor.</td>
</tr>
<tr>
<td>Color</td>
<td>White</td>
</tr>
<tr>
<td>Odor Threshold</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

### General Properties

<table>
<thead>
<tr>
<th>Boiling Point</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting Point</td>
<td>628 °C (1162.4 °F)</td>
</tr>
<tr>
<td>Decomposition Temperature</td>
<td>Data lacking</td>
</tr>
<tr>
<td>pH</td>
<td>7 (@ 1 wt. wt%)</td>
</tr>
<tr>
<td>Specific Gravity/Relative Density</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Density</td>
<td>75 to 80 lb(s)/ft³</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
</tr>
<tr>
<td>Viscosity</td>
<td>Not relevant</td>
</tr>
<tr>
<td>Explosive Properties</td>
<td>Data lacking</td>
</tr>
<tr>
<td>Oxidizing Properties</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

### Volatility

<table>
<thead>
<tr>
<th>Vapor Pressure</th>
<th>Data lacking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evaporation Rate</td>
<td>Data lacking</td>
</tr>
</tbody>
</table>

### Flammability

| Flash Point | Not relevant |
| LEL | Not relevant |
| Flammability (solid, gas) | Data lacking |
| UEL | Not relevant |
| Autoignition | Data lacking |

### Environmental

| Octanol/Water Partition coefficient | Data lacking |

### 9.2 Other Information

- No additional physical and chemical parameters noted.

### Section 10: Stability and Reactivity

#### 10.1 Reactivity

- No dangerous reaction known under conditions of normal use.

#### 10.2 Chemical stability

- Stable under normal temperatures and pressures.

#### 10.3 Possibility of hazardous reactions

- Hazardous polymerization will not occur.

#### 10.4 Conditions to avoid

- Dusting conditions. extreme humidity.

#### 10.5 Incompatible materials

- None known.

#### 10.6 Hazardous decomposition products

- Oxides of sodium. Oxides of phosphorus.

### Section 11 - Toxicological Information

#### 11.1 Information on toxicological effects
<table>
<thead>
<tr>
<th>Test Type</th>
<th>Dosage</th>
<th>Route</th>
<th>Species</th>
<th>Duration</th>
<th>Results</th>
<th>Test Class</th>
<th>Target Organs</th>
<th>Comments</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute Toxicity</td>
<td>(= 3053 \text{mg/kg})</td>
<td>Ingestion/Oral</td>
<td>Rat</td>
<td>NDA</td>
<td>LD50</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
</tbody>
</table>

**GHS Properties**

- **Acute toxicity**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Aspiration Hazard**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Carcinogenicity**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Germ Cell Mutagenicity**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Skin corrosion/Irritation**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Skin sensitization**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **STOT-RE**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **STOT-SE**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Toxicity for Reproduction**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Respiratory sensitzation**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met
- **Serious eye damage/Irritation**
  - EU/CLP: Classification criteria not met
  - OSHA HCS 2012: Classification criteria not met

**Route(s) of entry/exposure**
- Inhalation, Skin, Eye, Ingestion

**Potential Health Effects**

**Inhalation**
- **Acute (Immediate)**
  - Exposure to dust may cause irritation.
- **Chronic (Delayed)**
  - No data available

**Skin**
- **Acute (Immediate)**
  - May cause mild irritation. Exposure to dust may cause mechanical irritation.
- **Chronic (Delayed)**
  - No data available.

**Eye**
- **Acute (Immediate)**
  - May cause mild irritation. Exposure to dust may cause mechanical irritation. Excessive concentrations of nuisance dust in the workplace may reduce visibility and may cause unpleasant deposits in eyes.
- **Chronic (Delayed)**
  - No data available.

**Ingestion**
- **Acute (Immediate)**
  - Ingestion of large quantities may cause nausea, vomiting, diarrhea and abdominal discomfort.
- **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.
Section 12 - Ecological Information

12.1 Toxicity
- No data found for product.

12.2 Persistence and degradability
- No data found for product.

12.3 Bioaccumulative potential
- No data found for product.

12.4 Mobility in Soil
- No data found for product.

12.5 Results of PBT and vPvB assessment
- PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects
Ecological Fate
- No data found for product.

Section 13 - Disposal Considerations

13.1 Waste treatment methods
Product waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Packaging waste
- Dispose of content and/or container in accordance with local, regional, national, and/or international regulations.

Section 14 - Transport Information

<table>
<thead>
<tr>
<th>DOT</th>
<th>14.1 UN number</th>
<th>14.2 UN proper shipping name</th>
<th>14.3 Transport hazard class(es)</th>
<th>14.4 Packing group</th>
<th>14.5 Environmental hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>NDA</td>
<td>Not Regulated</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
</tr>
<tr>
<td>NDA</td>
<td>Not Regulated</td>
<td>NDA</td>
<td>NDA</td>
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<tr>
<td>NDA</td>
<td>Not Regulated</td>
<td>NDA</td>
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<tr>
<td>NDA</td>
<td>Not Regulated</td>
<td>NDA</td>
<td>NDA</td>
<td>NDA</td>
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</tr>
</tbody>
</table>

14.6 Special precautions for user
- None specified.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
- Data lacking.

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
SARA Hazard Classifications
- None
### Inventory

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>Canada DSL</th>
<th>Canada NDSL</th>
<th>China</th>
<th>EU EINECS</th>
<th>EU ELNICS</th>
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<tbody>
<tr>
<td>Sodium Hexametaphosphate</td>
<td>68915-31-1</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
</tr>
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### Inventory (Cont.)

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS</th>
<th>New Zealand</th>
<th>Philippines PICCS</th>
<th>TSCA</th>
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<tbody>
<tr>
<td>Sodium Hexametaphosphate</td>
<td>68915-31-1</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

### Canada

#### Labor
- **Canada - WHMIS - Classifications of Substances**
  - Sodium Hexametaphosphate

#### Environment
- **Canada - CEPA - Priority Substances List**
  - Sodium Hexametaphosphate

### Germany

#### Environment
- **Germany - TA Luft - Types and Classes**
  - Sodium Hexametaphosphate
- **Germany - Water Classification (VwVwS) - Annex 1**
  - Sodium Hexametaphosphate
- **Germany - Water Classification (VwVwS) - Annex 2 - Water Hazard Classes**
  - Sodium Hexametaphosphate
- **Germany - Water Classification (VwVwS) - Annex 3**
  - Sodium Hexametaphosphate

#### Environmental
- ID Number 7117, hazard class 1 - low hazard to waters

### Philippines

#### Other
- **Philippines - Priority Chemical List**
  - Sodium Hexametaphosphate

### Singapore

#### Other
- **Singapore - Corrosive and Explosive Substances - Corrosive Substances**
  - Sodium Hexametaphosphate
### United States

#### Labor

<table>
<thead>
<tr>
<th>Rule</th>
<th>CAS Number</th>
<th>Regulated Status</th>
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<tbody>
<tr>
<td>U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - OSHA - Specifically Regulated Chemicals</td>
<td>68915-31-1</td>
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</table>

#### Environment

<table>
<thead>
<tr>
<th>Rule</th>
<th>CAS Number</th>
<th>Regulated Status</th>
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<tbody>
<tr>
<td>U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - CAA (Clean Air Act) - Class II Ozone Depletors</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities</td>
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<tr>
<td>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances EPCRA RQs</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - CERCLA/SARA - Section 302 Extremely Hazardous Substances TPQs</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - CERCLA/SARA - Section 313 - Emission Reporting</td>
<td>68915-31-1</td>
<td>Not Listed</td>
</tr>
<tr>
<td>U.S. - CERCLA/SARA - Section 313 - PBT Chemical Listing</td>
<td>68915-31-1</td>
<td>Not Listed</td>
</tr>
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</table>

### United States - California

#### Environment

<table>
<thead>
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<th>Rule</th>
<th>CAS Number</th>
<th>Regulated Status</th>
</tr>
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<tbody>
<tr>
<td>U.S. - California - Proposition 65 - Carcinogens List</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - California - Proposition 65 - Developmental Toxicity</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - California - Proposition 65 - Maximum Allowable Dose Levels (MADL)</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - California - Proposition 65 - No Significant Risk Levels (NSRL)</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Female</td>
<td>68915-31-1</td>
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<tr>
<td>U.S. - California - Proposition 65 - Reproductive Toxicity - Male</td>
<td>68915-31-1</td>
<td>Not Listed</td>
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</tbody>
</table>

### 15.2 Chemical Safety Assessment
15.3 Other Information

- No Chemical Safety Assessment has been carried out.

- FDA Status: This product meets the compositional requirements of: 21 CFR 182.6760 SODIUM HEXAMETAPHOSPHATE

Section 16 - Other Information

Last Revision Date: 07/March/2014
Preparation Date: 13/August/2004
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

Format: EU CLP/REACH Language: English (US)  
WHMIS, EU CLP, EU DSD/DPD, OSHA HCS 2012  
Preparation Date: 13/August/2004  
Revision Date: 07/March/2014  
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