


SECTION 1. PRODUCT AND COMPANY IDENTIFICATION
1.1 Product identifier

Product Name: Humidi-Pro (4190-02)
General Description: Slowly-soluble glassy polyphosphate
CAS Number: 23209-59-8

1.2 Recommended use and restrictions on use

Recommended use: Water treatment; corrosion and scale control

1.3 Supplier's Details

Nu-Calgon
 2611 Schuetz Road, St. Louis, MO 63043 US

1.4 Emergency telephone number

(800) 424-9300 CHEMTREC

SECTION 2. HAZARDS IDENTIFICATION
2.1 Classification of the substance or mixture

Classification in accordance with OSHA Hazard Communication Standard, 29CFR 1910.1200:

| Ingredient | GHS Classification |
|------------------------------|--|
| Sodium Calcium Polyphosphate | Not classified. This product does not meet the regulatory definition of a hazardous substance. |

2.2 Label Elements

Labeling in accordance with OSHA Hazard Communication Standard, 29CFR 1910.1200:

Hazard pictograms: Not classified

Signal word: Not required

Hazard statements: Not classified. This product does not meet the regulatory definition of a hazardous substance. However, good industrial hygiene practices should be used in handling it.

Precautionary Statements: Not classified

2.3 Other Hazards: Other hazards which do not result in classification: Prolonged contact may cause drying of the skin. Handle with care as some sharp edges may cut. Inhalation of the dust may cause coughing and sneezing. Is not toxic if swallowed. No adverse health effects are expected if only small amounts are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea.

2.4 Environmental Effects: This material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS
3.1 Substance/mixture:

| Product/Ingredient name | Identifiers | % | GHS Classification |
|------------------------------|-----------------|--------------|--------------------|
| Sodium Calcium Polyphosphate | CAS: 23209-59-8 | Trade secret | Not classified |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4. FIRST AID MEASURES

4.1 Description of First Aid Measures

- Eye contact:** Rinse eyes immediately with plenty of water. Get medical attention if irritation occurs.
- Skin contact:** Avoid prolonged or repeated contact with skin. After handling, always wash hands thoroughly with soap and water. Get medical attention if irritation develops.
- Inhalation:** Not an expected route of entry. Avoid breathing dust. If inhaled, remove to fresh air. Inhalation of the dust may cause coughing and sneezing.
- Ingestion:** Not an expected route of entry. Immediate first aid is not likely to be required. No significant health effects are expected if only a small amount (less than a mouthful) are swallowed. If large quantities of this material are swallowed, give 2-3 glasses of water to drink and call a physician immediately. Do not induce vomiting unless directed to do so by medical personnel. Do not give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects

- Eye contact:** May cause irritation to eyes. Symptoms may include stinging, tearing, redness and swelling. Dusts may have a dehydrating effect.
- Skin contact:** May cause mild irritation to skin. Prolonged contact with the dry material may cause dryness or cracking of the skin.
- Inhalation:** If inhaled, remove to fresh air. Inhalation of the dust may cause irritation to the respiratory tract. Symptoms may include coughing and sneezing.
- Ingestion:** May cause gastrointestinal irritation. Symptoms may include nausea, vomiting, and diarrhea.

SECTION 5. FIRE FIGHTING MEASURES

5.1 Extinguishing media: Use water spray, dry chemical, carbon dioxide or appropriate foam.

5.2 Special hazards arising from the substance or mixture: Non-combustible.

Hazardous thermal decomposition products: Oxides of sodium, phosphorous, and magnesium.

5.3 Advice for firefighters:

Special protective equipment for fire fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures: Wear protective clothing and safety glasses. Spilled beads may present slipping hazard.

6.2 Environmental precautions: Avoid contact of spilt material and runoff with soil and surface waterways.

6.3 Methods and materials for containment and cleaning up

In case of spill: Pick up via sweep, scoop, or vacuum and place in a suitable container for reclamation or disposal, using a method that does not generate dust.

Personal Protection in Case of Spill: Safety glasses, Boots, and Gloves.

SECTION 7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Handling: Minimize dust generation and accumulation. Do not breathe dust. Avoid contact with skin and eyes. Handle with care as some sharp edges may cut. Wash thoroughly after handling. Do not permit eating, drinking, or smoking near the material. Avoid contact with moisture.

Hygiene Measures: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also section 8 for additional information measures.

7.2 Conditions for safe storage, including any incompatibilities

Storage: Keep containers tightly closed, in dry, cool and well-ventilated place. Protect from moisture. Do not store together with strong oxidizing agents, strong acids and strong bases. Keep away from heat.

Packaging materials Recommended: Use original container.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**8.1 Control parameters****Occupational exposure limit values:**

| Component | ACGIH TLV | OSHA PEL |
|--------------------------|--|--|
| Sodium Calcium Phosphate | 10 mg/m ³ nuisance dust – inhalable particulate | 15 mg/m ³ , total dust |
| | 3 mg/m ³ nuisance dust – respirable particulate | 5 mg/m ³ , nuisance dust – respirable particulate |

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.

8.2 Exposure controls

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

Personal Protective Measures

Eye protection: This product does not present a significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact. Wearing protective glasses or goggles are recommended.

Hand protection: Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Material may have some sharp edges; wearing protective gloves is recommended. Wash hands and any other contact points after handling.

Respiratory protection: None required when product is used normally. Avoid breathing dusts. Use MSHA/OSHA approved respiratory protection equipment when airborne exposure limits are exceeded.

Hygiene measures: Wear appropriate clothing to minimize skin contact. Do not eat, drink, or smoke in the work area. Clean skin thoroughly after work; apply skin cream.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

| | |
|------------------|---|
| Appearance | Glassy beads or crystals |
| Odor | Odorless |
| Odor Threshold | N/A |
| pH (1% solution) | 6.5 – 7.5 |
| Boiling point | Not applicable |
| Freezing point | Not applicable |
| Flash point | Non flammable |
| Melting Point | 1200°F |
| Bulk Density | 1.67 g/mL (approx. 14 lb/gal, 104.25 lb/ft ³ as beads) |
| Water solubility | Appreciable |

| | |
|------------------|----------------|
| Vapor Pressure | Not applicable |
| Vapor Density | Not applicable |
| Evaporation Rate | Not applicable |

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

SECTION 10 STABILITY AND REACTIVITY

| | |
|---|--|
| Reactivity | No specific test data related to reactivity available for this product or its ingredients. |
| Stability | The product is stable under normal handling and storage conditions described in Section 7. |
| Conditions to avoid | Extreme humidity or moisture, excess heat. |
| Incompatible materials | Strong oxidizing agents, strong acids and strong bases. |
| Hazardous reactions | Under normal conditions of storage and use, hazardous reactions will not occur. |
| Hazardous decomposition products | Oxides of sodium, phosphorus, and magnesium. |

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Based on test data and/or information on the components, this material may produce the following health effects:

Acute Toxicity:

Inhalation: May cause irritation to the respiratory tract. Symptoms may include coughing, sneezing, chest pain, runny nose and burning throat. Inhalation of product may aggravate existing chronic respiratory disease.

Ingestion: No adverse health effects are expected if only small amounts are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea. Symptoms may include nausea, vomiting and diarrhea.

Skin contact: May cause mild irritation to skin. Symptoms may include redness and burning. Prolonged contact with the dry material may cause dryness or cracking of the skin.

Eyes contact: Can cause irritation to eyes. Symptoms may include stinging, tearing, redness and swelling. Dust have a dehydrating effect.

Target organs: No specific data.

Sensitization: Not applicable.

Chronic toxicity:

Carcinogenicity: This product does not contain any substances that are considered by IARC, NTP, OSHA, EU or ACGIH to be "probable" or "suspected" human carcinogens.

Mutagenicity: Not applicable.

Reproductive toxicity: Not applicable.

Specific target organ toxicity (single exposure): Not applicable.

Specific target organ toxicity (repeated exposure): Not applicable.

Aspiration hazard: Not applicable.

11.2 Numerical Measures of Toxicity

Information is based on test data and/or information on the components.

| Product/ingredient name | Test | Species | Dose |
|--------------------------|--------------|---------|-------------|
| Sodium Calcium Phosphate | LD50, Oral | Rat | 5600 mg/kg |
| | LD50, Dermal | Rabbit | >7940 mg/kg |
| | Inhalation | No Data | No Data |

SECTION 12 ECOLOGICAL INFORMATION

12.1 Ecotoxicity: Not available; no ecotoxicity studies have been conducted by the manufacturer on this product.

12.2 Persistence and Degradability: Not applicable, since inorganic substance.

12.3 Bioaccumulative potential: Not available.

12.4 Mobility in soil: Soluble in water. 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.

12.5 Results of PBT and vPvB assessment: Not applicable.

12.6 Other adverse effects: This material is not expected to product any significant adverse environmental effects when recommended use instructions are followed.

SECTION 13 DISPOSAL CONSIDERATIONS

| | |
|-------------------------------|--|
| Waste Disposal Method: | Dry material may be land filled or recycled in accordance with local, state and federal regulations. |
| Hazardous waste: | N/A |
| Packing: | Empty containers should be taken for local recycling, recovery or waste disposal. |

SECTION 14 TRANSPORT INFORMATION

| | |
|----------------------------------|---------------------------------------|
| UN Number | Not Applicable |
| DOT Proper shipping name: | Not regulated |
| Marine Pollutant | No |
| Transport Label: | None |
| NMFC Description: | NMFC 46510, Phosphates, NOI, Class 55 |

SECTION 15 REGULATORY INFORMATION**NSF/ANSI Certification****RoHS2 Compliance**

RoHS2 compliant. Slow Phos does not contain prohibited substances above the maximum concentration values (MCV) listed in Article 4 and Annex II of the European Union directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment (recast), also known as RoHS2. Under this directive, lead, mercury, cadmium, hexavalent chromium, polybrominated biphenyls and polybrominated diphenyl ethers are prohibited in the manufacture of electrical and electronic equipment above the MCVs in Annex 11, with the exception of those items listed in Annexes III and IV to the directive.

REACH Compliance

Does not contain any chemicals on the REACH SVHC List.

TSCA Inventory

All material components are listed in the in the TSCA inventory.

CERCLA

Contains no listed substances.

SARA 302 Extremely Hazardous Substances

Contains no listed substances.

SARA 311/312**Hazard Categories**

| <u>Acute/Immediate</u> | <u>Chronic/Delayed</u> | <u>Fire</u> | <u>Reactivity</u> | <u>Pressure</u> |
|------------------------|------------------------|-------------|-------------------|-----------------|
| No | No | No | No | No |

SECTION 16 OTHER INFORMATION

Revision Date: 05/14/2014

Supersedes: 05/01/2013

| | <u>Health</u> | <u>Fire</u> | <u>Reactivity</u> | <u>Other</u> |
|------------------------------|---------------|-------------|-------------------|-----------------------------------|
| Suggested NFPA Rating | 0 | 0 | 0 | |
| Suggested HMIS Rating | 0 | 0 | 0 | B = Safety glasses, gloves |

NOTICE

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Manufacturer 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. 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, Manufacturer makes no representations as to its accuracy or sufficiency. Conditions of use are beyond Manufacturer'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.