SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product Name: Humidi-Pro (4190-02)

Product Description: Slowly soluble glassy polyphosphate

Synonyms: Sodium calcium polyphosphate; Sodium polyphosphates, glassy

1.2 Relevant identified uses of the substance and uses advised against

Water treatment, corrosion and scale control.

1.3 Supplier's Details

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

1.4 Emergency telephone number: (800) 424-9300 CHEMTREC

SECTION 2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

GHS Classification in accordance with 29CFR 1910.1200 (OSHA HCS):

No classification. This product does not meet the regulatory definition of a hazardous substance.

2.2 Label Elements

Hazard pictograms: None
Signal word: Not required.
Hazard statements: Not classified.
Precautionary Statements: Not classified.

2.3 Other Hazards

This product does not meet the regulatory definition of a hazardous substance. However, good industrial hygiene practices should be used in handling it. 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. 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
Polyphosphoric acids, sodium salts	Trade Secret	Trade secret	Not classified
Phosphoric acid, calcium salt	Trade Secret	Trade secret	Not classified

The specific chemical identity and/or concentration is being withheld because it is trade secret information. Remaining ingredients do not require disclosure under regulatory hazard criteria. 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: Non-combustible; use extinguishing media appropriate for surrounding fire.

5.2 Special hazards arising from the substance or mixture: None known.

Hazardous thermal decomposition products: Oxides of phosphorous, sodium, calcium, 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, gloves, 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

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. Keep product dry until use; product will hydrolyze when in 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

Store in a cool, dry place to maintain product performance. Keep containers tightly closed. Keep dry and protect product from moisture until use; product will hydrolyze when in contact with moisture. Do not store together with strong oxidizing agents, strong acids, or strong bases. Keep away from heat.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values:

OSHA and ACGIH have not established specific exposure limits for this mixture. 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.

ACGIH TLV	OSHA PEL
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

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 and gloves 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/ft3 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	Dusting conditions; 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 phosphorus, sodium, calcium, and magnesium.

SECTION 11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

No classification. This product does not meet the regulatory definition of a hazardous substance according to 29 CFR 1910. No toxicity studies have been conducted by the manufacturer. Information is based on Product Test Data, Ingredient Data, or Data Based on Testing of Similar Materials.

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

Sensitization: Not expected to be a sensitizer.

Bisphenol A (BPA): BPA is not used in the production this material and is not intentionally added with any additives used in the manufacture of this material.

Chronic toxicity

Carcinogenicity: Classification for carcinogenicity is not warranted. 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: Classification for mutagenicity is not warranted.

Reproductive toxicity: Classification for reproductive toxicity is not warranted.

Specific target organ toxicity (single exposure): Classification for specific target organ toxicity is not warranted.

Specific target organ toxicity (repeated exposure): Classification for specific target organ toxicity is not warranted.

Aspiration hazard: Based on available data, the classification criteria are not met.

11.2 Numerical Measures of Toxicity

Information is based on Product Test Data, Ingredient Data, or Data Based on Testing of Similar Materials.

Test	Species	Results (Classification, Category)	Basis
Oral Toxicity, LD50	Rat	Not classified	Based on Ingredients
Dermal Toxicity, LD50	Rabbit	Not classified	Based on Ingredients
Eye Irritation	Rabbit	Not classified	Based on Ingredients
Skin Irritation	Rabbit	Not classified	Based on Ingredients

SECTION 12 ECOLOGICAL INFORMATION

12.1 Ecotoxicity

Not available; no ecotoxicity studies have been conducted by the manufacturer.

12.2 Persistence and Degradability

Not applicable, since inorganic substance. Degradability in sewage works: Slow hydrolysis to orthophosphate form.

12.3 Bioaccumulative potential: Not expected to bioconcentrate.

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 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:	Not applicable
Packing:	Empty containers should be taken for local recycling, recovery or waste disposal.

SECTION 14 TRANSPORT INFORMATION

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

SECTION 15 REGULATORY INFORMATION

NSF/ANSI Certification	Certified under NSF/ANSI Standard 42 Drinking Water Treatment Units – Aesthetic Effects. Product conforms to the material requirements only. EPA limits the phosphate content of effluent water to 10 mg/L (MUL). Certified under NSF/ANSI Standard 60 Drinking Water Treatment Chemicals – Health Effects, for use in potable water systems at concentrations up to 14 mg/L (MUL).
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.
CERCLA	Contains no listed substances.
SARA 302 Extremely Hazardous Substances	Contains no listed substances.

SARA 311/312 Hazard Categories

Acute/Immediate	Chronic/Delayed	Fire	Reactivity	Pressure
No	No	No	No	No

SARA 313 Toxic Release Inventory	Contains no listed substances.
CALIFORNIA PROPOSITION 65	This product does not contain substances which require warning under California Proposition 65.

Chemical Inventory Lists

Australia (AICS)	All components are listed on the Australian Inventory of Chemical Substances.
Canada (DSL)	All components are listed on the on the Canada Domestic Substances List.
China (IECSC)	All components are listed on the Inventory of Existing Chemical Substances in China.
Europe (EINECS)	All components are listed on the European Chemical Substances Information System.
Japan (METI/CSCL)	All components are listed on the METI/CSCL Inventory list.
Korea (KECI)	All components are listed on the Korean Existing Chemicals Inventory.
New Zealand (NZIoC)	All components are listed on the New Zealand Inventory of Chemicals.
Philippines (PICCS)	All components are listed on the Philippine Inventory of Chemicals and Chemical Substances.
Taiwan (TCSI)	All components are listed on the Taiwan Chemical Substance Inventory.
USA (TSCA)	All components are listed on the US TSCA Inventory or are exempt.

SECTION 16 OTHER INFORMATION

Revision Date: 04/01/2017
Supersedes Date: 03/03/2015

	Health	Fire	Reactivity	Other
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 (SDS) 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 SDS 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.