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PRODUCT NAME: BORREGRO HA-2 POWDER

HONOTECHNICA INC. EMERCENCY PRICHE (745)050 0544 MORONO 400000

LIGNOTECH USA, INC. EMERGENCY PHONE (715)359-6544 MSDS NO.: 100963

Research & Development \*CHEMTREC PHONE (800)424-9300 ORDER NO.:

100 Grand Avenue PREPARED ON: 01/30/2008
Rothschild, WI REPLACES: All Previous
54474-1198

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\*Use only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

### I. PRODUCT IDENTIFICATION

Common Name: Potassium Humate Chemical Formula Amorphous Polymer Synonyms: See Above Chemical Family. Humic Acid K Salts Manufacturer: LignoTech USA. Inc. CAS Numbers: 68514-28-3

Manufacturer: LignoTech USA, Inc.
Shipping Name - DOT: Coal - Class 50

Hazard Class - DOT: Not Restricted UN Number: Excluded Hazard Class - IATA: Not Restricted Physical State: Powder

HMIS Rating(0-4) HEALTH = 1 FIRE = 1 REACTIVITY = 0 SPECIAL = 0

WARNING NUISANCE DUST -- As with all dusts, avoid high concentrations

#### II. HAZARDOUS INGREDIENTS

Principal Hazardous Components Percent Threshold Limit Value (units)

Silica, Crystalline 1% CAS #014808-60-7, 0.05 mg/m3 NIOSH

#### III. PHYSICAL DATA

Boiling Point(C): Not Applicable Specific Gravity (25 C): Not Applicable

Freezing Point (C): Not Applicable pH (3% Soln.): 8.5
Vapor Pressure (mm Hg): Not Applicable Bulk Density (g/ml): 0.55

Vapor Density (Air = 1):Not ApplicableSolubility in Water.100% Soluble% Volatiles By Weight6-10% H20Evaporation Rate:Not ApplicableAppearance & Odor.Black powder with slight odorWater/Oil Dist. Coeff.:100% in water

# IV. HEALTH HAZARD DATA

Threshold Limit Values OSHA PELV = 10 mg/M3 for nuisance dust

NIOSH PEL = 0.05 mg/m3 for silica, crystalline

Carcinogen Listings- NTP / IARC: IARC lists inhaled crystalline silicaquartz from occupational sources as group I; carcinogenic

to humans.

Primary Route(s) of Entry: Skin contact, eye contact, inhalation

Symptoms of Overexposure: None known. Conditions Aggravated by Exposure None known.

Irritancy of Material: Potential irritant to eyes, skin, lungs, nose and throat

Sensitization to Material None known.
Teratogenicity: None known.
Mutagenicity: None known.
Reproductive Toxicity: None known.
Synergistic Substances: None known.

First Aid -- Eyes: Irrigate with potable water.

Skin: Skin should be cleaned with soap and water

Inhalation: Remove from dusty area.

Ingestion: Give water to dilute and get medical attention

Notes to Physician: Very low toxicity. Chronic exposure over the PEL may result in silicosis or other respiratory

ailments.

# V. FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): Not Applicable Auto Ignition Temp: 400 C for dust

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Flammable Limits in Air, % By Volume Lower: 0.2 oz./cu.ft. Upper: 3.5 oz./cu.ft.

Extinguishing Media Use water spray, carbon dioxide, dry chemical, alcoholtype or universal-type

foams applied by manufacturer's recommended techniques

Special Fire Fighting Procedures Use supplied breathing air and protective clothing

Unusual Fire and Explosion Hazards Flammable solids may provide conditions for a dust explosion

## VI. SPILL OR LEAK PROCEDURES

Spill Response: Mechanically collect and remove spilled materialArea may be washed with water.

**Neutralizing Chemicals** None required.

Waste Disposal Methods Incinerate, bury or flush to sewer following applicable regulations

### VII. REACTIVITY DATA

Stability: Stable Conditions to Avoid Contact with strong oxidizing agents

Incompatibility: Materials to Avoid: None Hazardous Polymerization Will not occur Conditions to Avoid None **Hazardous Decomposition Products** Sulfur dioxide, carbon dioxide, and carbon monoxide

## VIII. CONTROL MEASURES

Ventilation Requirements Sufficient ventilation is recommended to keep dust levels below the PEL

Respiratory Protection: Full respiratory protection program recommended

NIOSH approved dust mask recommended

Protective Gloves: Gloves recommended Eve Protection: Goggles recommended

Other Protective Equipment Clothing which contacts skin should be changed daily

#### IX. SPECIAL PRECAUTIONS

Repair/Maintenance of

Contaminated Equipment

Hygiene in Handling and Storage

Other:

None required.

Personal hygiene is strongly encouraged so all clothing items are changed daily Normal precautions common to good manufacturing practice should be followed

### X. ADDITIONAL REGULATORY CONCERNS

The information and recommendations contained herein are offered as a service to our customers but are not intended to relieve the user from its responsibility to investigate and understand pertinent sources of information and to comply with all laws and procedures applicable to the safe handling and use of these materials. The information and recommendations provided herein were believed by LignoTech USA, Inc. to be accurate at the time of preparation or obtained from sources believed to be generally reliable. However, LignoTech USA, Inc. makes no warranty concerning their accuracy and LignoTech USA, Inc. will not be liable for claims relating to any party's use of or reliance on information or recommendations contained herein, regardless of whether it is claimed that the information or recommendations are inaccurate, incomplete or otherwise misleading.