MATERIAL SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION		
PRODUCTS NAME(s)	PRIMEGEL, LC, ASC, AST, ET AL.	PRODUCT CODE: AB3A005
GENERIC NAME:	Bentonite	MSDS CODE NO. A202PAB3A005
CHEMICAL NAME:	Sodium /Calcium Aluminum Silicate	CASE REGISTRY NO. 1302-78-9*
MANUFACTURING ADDRESS:	WESTERN CLAY CO. 508 East Center Aurora, Utah 84620	TELEPHONE NUMBERS: EMERGENCY: 213-664-2121 CHEMTREC: 800-424-9300 BUSINESS: 800-982-7960

II. HAZARD IDENTIFICATION

HEALTH/PHYSICAL HAZARDS: Material dusts containing less than 1% free crystalline silica (quartz) - Are-classified-as nuisance particulates. Exposure to these dusts may cause irritation to eyes, ears, throat, and upper respiratory tract. This materials dust may contain more than I% free silica as Quartz. Chronic (long term) exposure to air born free silica at levels higher than TLV's may lead to the development of silicosis or other respiratory problems. (See Section VI)

HAZARD LISTING: Nuisance Particles are listed by ACGIH. Free Crystalline Silica as Quartz is listed by OSHA and ACGIH as a Hazardous Material.

III. PHYSICAL DATA

Melting Point: (1450 Deg C)

Bulking Value 90 lbs

Solubility in Water: Insoluble, Forms Colloidal Suspension $\,$ pH : 8-10 $\,$

Appearance : Tan, Light Green Pebbles or Granules Density : 701b / cu. Ft Powder or Compact Granular

IV. FIRE AND EXPLOSION DATA

Flash Point N.A. Flammable Limits LEL: NA UEL: NA

Special Fire Fighting Procedures : NA

Unusual Fire and Explosion Hazards: None, Product Will Not Support Combustion.

Extinguishing Media: None for Product, Any Media can Be Used For Packaging

V. REACTIVITY

Stability: Stable

Hazardous Polymerization: None

Hazardous Decomposition Products: None

Incompatibility None

NA = Not Applicable ND = Not Determined Date Prepared: December 23, 1996



VI. HEALTH HAZARD INFORMATION

ROUTES OF EXPOSURE AND EFFECTS

Skin: Possible drying resulting in dermatitis.

Eves: Mechanical Irritant.

<u>Inhalation:</u> (Acute, Short Term) Exposure to excessive concentrations of dust may cause irritation of the Nose, Throat, And Upper Respiratory Tract. (Chronic, Long Term) Chronic exposure to crystalline silica such as quartz were levels exceed TLV's can cause Silicosis and other respiratory problems. Short term exposure to very high concentrations may lead to increased risk and accelerated onset of silicosis and respiratory damage. Silicosis is a progressive, degenerative, disabling, and sometimes fatal lung disease characterized by coughing, shortness of breath, wheezing, and fibrotic changes in the lungs with scarring and nodular formation.

<u>Ingestion:</u> Accidentally this material will generally cause no adverse effects. Minor intestinal irritation is possible.

<u>Permissible Exposure Limits</u>: OSHA PEL ACGIH TLV

(For air contaminants) (8hr. TWA)

Bentonite as nuisance dust

Total dust 15mg/cubic meter ND Respirable dust 5mg/cubic meter ND

Crystalline Quartz (respirable) 0.1 mg/cubic meter 0.1 mg/cubic meter

Where crystobalite or tridymite are present ussse ½ of the PEL or TLV value for crystalline quartz.

Carcinogenicity: Bentonite is not listed by NTP, IARC, or OSHA. IARC, 1987 concludes that there is limited evidence suggesting the carcinogenicity in humans of inhaled crystalline silica (IARC Class 2A).

Acute oral LD: ND Acute Dermal LD: Aquatic Toxicology LC: ND

Emergency and First Aid Procedures

Skin: Wash with soap and water until clean

Eyes: Flush with water until irritation ceases. Do not rub eyes.

Inhalation: Move to area free from dust. If symptoms of irritation persist contact physician. Inhalation may aggravate existing respiratory illness.

VII. HANDLING AND USE PRECAUTIONS

Steps to be taken if material is released or spilled: Avoid breathing dust; wear respirator approved for silica bearing dust. Vacuum up to avoid generating airborne dust. Avoid using water. Product is slippery when wet.

<u>Waste Disposal Methods</u>: Product should be disposed of in accordance with applicable local, state, and federal regulations.

<u>Handling and Storage Precautions:</u> Use NIOSH/MSHA respirators approved for silica bearing dust when free silica containing airborne bentonite dust levels exceed PEL/TLV's. Clean up spills promptly to avoid making dust. Storage area floors may become slippery when wet.

VIII. INDUSTRIAL HYGIENE CONTROL MEASURES

Ventilation Requirements: Mechanical, general room ventilation. Use local ventilation to maintain PEL's/TLV's.

Respirator: Use respirator approved by NIOSH/MSHA for silica bearing dust.

Eye Protection: Use safety glasses or goggles to minimize material from getting into eyes.

Gloves: Generally not necessary.

Other Protective Clothing or Equipment: None

IX. SPECIAL PRECAUTIONS

Avoid prolonged inhalation of airborne dust.

DEPARTMENT OF TRANSPORTATION INFORMATION

Shipping Name: Common Ground Clay (NOIBN) Hazard Class: Not Hazardous Cautionary Labeling: None required

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