SECTION 1: IDENTIFICATION

PRODUCT NAME(s): Prime Gel API, Prime Gel Premium, Aquagel, Slikgel, AMC GEL, Quik-Gel Gold, Star Gel, SureTech 80

GENERIC NAME: Bentonite

SYNONYMS: Sodium Bentonite, Montmorillonite, Smectite Clay

CASE REGISTRY NO.: 1302-78-9

MANUFACTURING ADDRESS: Western Clay Company
620 East SR 24
Aurora, UT 84620

CONTACT NUMBERS:
Emergency: 213-664-2121
Western Clay: 800-982-7960

RECOMMENDED USE: Bentonite has a variety of uses. It can be used as a rheology modifier, binding agent, absorbent, filler and other i.e. for applications like: foundry, iron ore agglomeration, drilling, construction - civil engineering, filtration, cat litter, and feed additives.

USE RESTRICTIONS: There are no identified uses advised against.

SECTION 2: HAZARD IDENTIFICATION

GHS CLASSIFICATION
Signal: Danger
Causes damage to the lungs through prolonged or repeated exposure if inhaled

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 1% 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 11)

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

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>SUBSTANCES:</th>
<th>CAS #</th>
<th>Percent (w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crystalline silica, quartz</td>
<td>14808-60-7</td>
<td>0-5%</td>
</tr>
<tr>
<td>Crystalline silica, cristobalite</td>
<td>14464-46-1</td>
<td>0-1%</td>
</tr>
<tr>
<td>Crystalline silica, tridymite</td>
<td>15468-32-3</td>
<td>0-1%</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>8-12%</td>
</tr>
<tr>
<td>Acrylic Polymer* (Prime Gel API)</td>
<td>9033-79-8</td>
<td>.04-.08%</td>
</tr>
<tr>
<td>(Slikgel, Quik-Gel, Star Gel, AMC GEL)</td>
<td>9033-79-8</td>
<td>.15-.175%</td>
</tr>
<tr>
<td>Acrylic Polymer* (Prime Gel Premium API, Swell Plug)</td>
<td>9033-79-8</td>
<td>0%</td>
</tr>
</tbody>
</table>

*Acrylic Polymer has no known OSHA hazards and is not a dangerous substance according to GHS.
SECTION 4: FIRST AID MEASURES

INHALATION: If inhaled, remove from area to fresh air. Get medical attention if respiratory irritation develops or if breathing becomes difficult.

SKIN: Wash with soap and water. Get medical attention if irritation persists.

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get medical attention if irritation persists.

INGESTION: Under normal conditions, first aid procedures are not required.

NOTES TO PHYSICIAN: Treat symptomatically.

SECTION 5: FIRE-FIGHTING MEASURES

FLASH POINT RANGE: Non-flammable Silicate Mineral

FLAMMABLE LIMITS: LEL: NA UEL: NA

FIRE EXTINGUISHING MEDIA: All standard firefighting media

SPECIAL EXPOSURE HAZARDS: Not Applicable

NFPA RATINGS: Health 1, Flammability 0, Reactivity 0

HMIS RATINGS: Health 1*, Flammability 0, Reactivity 0, PPE: At

SECTION 6: ACCIDENTAL RELEASE MEASURES

MATERIAL SPILL OR RELEASE: 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.

WASTE DISPOSAL METHOD: Product should be disposed of in accordance with applicable local, state, and federal regulations. There are no known environmental precautionary measures. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage, and disposal.

SECTION 7: HANDLING AND STORAGE

HANDLING PRECAUTIONS: This product may contain quartz, cristobalite, and/or tridymite which may become airborne without a visible cloud. Avoid breathing dust. Avoid creating dusty conditions. Use only with adequate ventilation to keep exposure limits below permissible limits. Material is slippery when wet.

STORAGE INFORMATION: Do not reuse empty container. Use good housekeeping in storage and work areas to prevent accumulation of dust. Close container when not in use. Keep from excessive heat.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION REQUIREMENTS: Use approved industrial ventilation and local exhaust as required to maintain exposures below applicable exposure limits listed in section 11.

RESPIRATOR: Not normally needed but, in areas that are not properly ventilated use a respirator approved by NIOSH/MSHA for silica bearing dust.

EYE PROTECTION: Use safety glasses or goggles to protect against exposure.

HAND PROTECTION: Normal work gloves.

SKIN PROTECTION: Wear clothing appropriate for the work environment. Dusty clothing should be laundered before reuse. Use precautionary measures to avoid creating dust when removing or laundering clothing.

OTHER PPE: None known.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: powder

BULKING VALUE: 90 lbs.

MELTING POINT: 1450 °C

SOLUBILITY IN WATER: Insoluble, Forms Colloidal Suspension

COLOR: Tan, Light Green, Red

DENSITY: 70 lb/ft³ powder or compact granular

pH: 8-10

ODOR: Mild earthy
SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable
HAZARDOUS POLYMERIZATION: None
INCOMPATIBILITY: None
HAZARDOUS DECOMPOSITION PRODUCTS: None

SECTION 11: TOXICOLOGICAL INFORMATION

TOXICITY TESTS:
- Oral
  - ND
- Genotoxicity
  - ND
- Dermal
  - ND
- Reproductive
  - ND
- Inhalation
  - ND
- Primary Irritation Effect
  - ND

PRINCIPLE ROUTE OF EXPOSURE:
Eye or skin contact, inhalation

SKIN:
Possible drying resulting in dermatitis

EYES:
Mechanical irritant

INGESTION:
Accidentally this material will generally cause no adverse effects. Minor intestinal irritation is possible.

(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 where 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.

PERMISSIBLE EXPOSURE LIMITS:
(For air contaminants 8 hour TWA)
- Bentonite as Nuisance Dust
  - Total Dust: 15mg/m³
  - Respirable Dust: 5mg/m³
- Crystalline Quartz (respirable)
  - 0.1mg/m³

Bentonite is not listed by NTP, IARC, or OSHA. The International Agency for Research on Cancer (IARC) has determined that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources can cause lung cancer in humans, and experimental evidence that tridymite as a carcinogen in animals. The National Toxicology Program (NTP) classifies respirable crystalline silica as “Known to be a human carcinogen”.

SECTION 12: ECOLOGICAL INFORMATION

MOBILITY (water/soil/air):
- ND

FISH TOXICITY:
- TLM96: 10000 ppm (Oncorhynchus mykiss)

CRUSTACEANS TOXICITY:
- ND

ALGAE TOXICITY:
- ND

BIO-ACCUMULATION:
- ND

OTHER INFORMATION:
- ND

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL METHOD:
Product should be disposed of in accordance with applicable local, state, and federal regulations. There are no known environmental precautionary measures. Consider possible toxic or fire hazards associated with contaminating substances and use appropriate methods for collection, storage, and disposal.
SECTION 14: TRANSPORTATION INFORMATION

SHIPPING NAME: Common Ground Clay (NOIBN)

HAZARD CLASS: Not Hazardous

CAUTIONARY LABELING: None required

LAND TRANSPORTATION RESTRICTIONS:

DOT: Not Restricted

CANADIAN TDG: Not Restricted

ADR: Not Restricted

AIR TRANSPORTATION RESTRICTIONS:

ICAO / IATA: Not Restricted

SEA TRANSPORTATION RESTRICTIONS:

IMDG: Not Restricted

SECTION 15: REGULATORY INFORMATION

U.S. REGULATIONS:

All components listed on inventory or are exempt.

US TSCA Inventory

EPA SARA Title III Extremely Hazardous Substances

EPA SARA (311, 312) Hazard Class

EPA SARA (313) Chemicals

EPA CERCLA/Superfund Reportable Spill Quantity

EPA RCRA Hazardous Waste Classification

California Proposition 65

MA Right-to-Know Law

NJ Right-to-Know Law

PA Right-to-Know Law

CANADIAN REGULATIONS:

Canadian DSL Inventory

All components listed on inventory.

WHMIS Hazard Class

D2A Very Toxic Materials Crystalline Silica

SECTION 16: OTHER INFORMATION

ADDITIONAL INFORMATION:

This SDS was updated on 10/19/16. For additional information on the use of this product, or for questions about the Material Safety Data Sheet for this or other Western Clay Company products, please contact:

Western Clay Company
Toll Free 1-800-982-7960 Telephone 435 529-3281 Fax 435 529-3714
620 East SR 24 ● PO BOX 127 ● AURORA, UT 84620-0127

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