SECTION II.  HAZARDOUS INGREDIENTS

Free Silica (Crystalline Quartz)  Formula: SiO₂  Typically 0.1-4%  CAS No. 14808-60-7

Kaolin or kaolinite is a naturally occurring hydrous aluminum silicate mineral.  Formula: H₄Al₂Si₂O₉; SiO₂

SECTION III.  PHYSICAL DATA

BOILING POINT  Not Applicable  VAPOR PRESSURE:  Not Applicable  SPECIFIC GRAVITY: 2.56

MELTING POINT: 1740-1780°C  SOLUBILITY IN WATER: Negligible  PERCENT VOLATILE: Not Applicable

ODOR AND APPEARANCE: Earthy smell when wet. White to light gray lumps; buff-colored powder.

SECTION IV.  FIRE AND EXPLOSION DATA:  Non-flammable and non-explosive.

SECTION V.  HEALTH HAZARD INFORMATION

OSHA REL:  CRYSSTALINE QUARTZ (Respirable) 0.1 mg/m³ (TWA-TLV)

ACGIH TLV:  CRYSTALLINE QUARTZ (Respirable) 0.1 mg/m³ (TWA-TLV)

HAZARD BY ROUTES OF EXPOSURE:

INHALATION: WARNING: These products contain crystalline silica. Repeated, prolonged inhalation of dust may cause delayed lung injury which may result in silicosis or pneumoconiosis. The International Agency For Research On Cancer in its publication, "IARC Monographs On The Evaluation Of The Carcinogenic Risk To Humans - Silica and Some Silicates" - Volume 42, 1987, has concluded that there is sufficient evidence for the carcinogenicity of crystalline silica in experimental animals, and limited evidence for the carcinogenicity of crystalline silica in humans, and has, therefore, classified crystalline silica in Group 2A of Probable Carcinogens. The National Toxicology Program's ("NTP's") Sixth Annual Report on Carcinogens lists crystalline silica (respirable) as a substance which may reasonably be anticipated to be a carcinogen. In support of this listing, NTP cited the IARC conclusions mentioned above. The animal studies found increased tumors in rats resulting from inhalation, intrathoracic instillation, and interpleural or intraperitoneal injection. In humans, a number of studies have found an association between lung cancer and exposure to dust containing respirable crystalline silica. These studies only rarely, however, included data on smoking, potential confounding exposures, and assurance of the comparability of the referent population.

INGESTION: Nausea may result from accidental ingestion. May cause cancer, based on animal data.
SECTION V. HEALTH HAZARD INFORMATION (Continued)

EYE: Inflammation of eye tissue may occur from overexposure.

SKIN CONTACT/ABSORPTION: Inflammation from contact with open cuts may occur.

SIGNS AND SYMPTOMS ASSOCIATED WITH EXPOSURE OVER THE TLV:
Short Term: Shortness of breath, coughing associated with inhalation of dust. Long Term: May cause silicosis, a chronic disease of the lungs marked by acute fibrosis; may cause cancer, based on animal data.

EMERGENCY/FIRST AID PROCEDURES:
INHALATION: Move to fresh air; consult physician and/or obtain competent medical assistance as necessary.
INGESTION: Consult physician and/or obtain competent medical assistance.
EYE CONTACT: Flush with water; consult physician and/or obtain competent medical assistance as necessary.
SKIN CONTACT: Wash thoroughly with water.

SECTION VI. REACTIVITY DATA
STABILITY: Kaolin is a stable material under ordinary conditions.
INCOMPATIBILITY: None known.
HAZARDOUS POLYMERIZATION: Not known to occur.

SECTION VII. SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN IF MATERIAL IS SPILLED OR RELEASED:
If uncontaminated, recover and reuse. If contaminated, collect in suitable containers for disposal. Use appropriate method to avoid creating dust. Avoid breathing dust. Wear a NIOSH/MSHA/OSHA approved respirator.

WASTE DISPOSAL METHOD: May be buried in approved land disposal facility in accordance with Federal, State, and local regulations. Kaolin is not a hazardous waste under RCRA (40 CFR Part 261). Kaolin is not regulated by DOT.

SECTION VIII. CONDITIONS FOR SAFE USE
VENTILATION: Local exhaust required for dust removal. Refer to OSHA 1910.24, ASTM, and/or ANSI Standards. Do not exceed OSHA PEL or ACGIH TLV.
RESPIRATORY PROTECTION: Use NIOSH/MSHA/OSHA approved respirator if dust is present.
EYE PROTECTION: Optional, but recommended.
PROTECTIVE GLOVES: Optional, but recommended.

SECTION IX. SPECIAL PRECAUTIONS
1. Do not breathe dust.
2. Avoid creating dust in closed areas.
3. Use adequate ventilation as recommended by NIOSH/MSHA/OSHA for crystalline silica.