



MATERIAL SAFETY DATA SHEET

To comply with OSHA's 29 CFR 1910.1200 and BHI No. 70 WHMIS Hazard Communication Standards.

SECTION I. IDENTITY OF PRODUCT AND PRODUCER

DATE PREPARED: May 10, 2000

DATE MAILED: _____

TRADE NAME: MINSPAR 1, MINSPAR 3, MINSPAR 200

CHEMICAL NAME: FELDSPAR CAS NUMBER: 68476-25-5 (Feldspar); 14808-60-7 (Quartz); 12001-26-2 (Mica)

PRODUCER'S NAME AND ADDRESS (HO):

K-T Feldspar Corporation
P. O. Box 309
Highway 226 North
Spruce Pine, NC 28777

TELEPHONE NUMBERS:

828-765-9621
828-765-6304 FAX

EMERGENCY CONTACT:

CHEMTREC: (800) 424-9300*
*To be used only in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

SECTION II. HAZARDOUS INGREDIENTS

Free Silica (Quartz)*

Typically 7 - 13%

CAS NO. 14808-60-7

*Feldspar, as reported on this Company's Material Safety Data Sheet, Form 0005ta, is an anhydrous, inorganic, naturally occurring igneous mineral rock (sodium, potassium, calcium, aluminum silicate) devoid of any asbestos minerals or acicular particles. These products contain crystalline silica, as quartz up to 13% dry weight. It is non-flammable and non-toxic and does not begin to fuse until 1950°F (1066°C). Formula: (Na,K,Ca)₁₋₂ O-Al₂O₃ 2-6SiO₂; SiO₂.

MSHA / OSHA
HHS Ratings:

Health
2

Flammability
0

Reactivity
0

Personal Protection
E

SECTION III. PHYSICAL DATA

Solubility in Water:

Negligible

Specific Gravity:

2.60 - 2.65

Vapor Pressure:

Not Applicable

Percent Volatile:

Not Applicable

Odor and Appearance:

Earthy odor when wet. Raw color: white to off-white granules and/or powder.

SECTION IV. FIRE AND EXPLOSION DATA: Non-flammable

SECTION V. HEALTH HAZARD DATA

OSHA PEL:

Respirable Crystalline Quartz (TWA-TLV) = 0.1 mg/m³

ACGIH TLV:

Respirable Crystalline Quartz (TWA-TLV) = 0.1 mg/m³

NIOSH TWA:

Crystobalite & Tridymite (see STABILITY) (TWA-TLV) = 0.05 mg/m³

ROUTE OF ENTRY:

Inhalation

HEALTH HAZARDS: **WARNING:** These feldspar products contain crystalline silica which may cause delayed respiratory disease (silicosis) if inhaled over a prolonged period of time. Avoid breathing dust. Use NIOSH/MSHA approved respirator where TLV for crystalline silica may be exceeded.

IARC MONOGRAPH VOLUME 68, 1997 concludes that there is sufficient evidence that inhaled crystalline silica causes cancer in humans. IARC classification: Group 1.

The NTP, in the Sixth Annual Report on Carcinogens, 1991, has added crystalline silica to its list of substances that are "reasonably anticipated to be carcinogens".

FIRST AID: **EYES:** Flush thoroughly with water for 10 to 15 minutes. Contact physician if irritation persists.

BREATHING: If breathing difficulty develops, remove to fresh air. If breathing difficulty persists, contact physician.

SECTION VI. REACTIVITY DATA

STABILITY: Feldspar is stable under ordinary conditions. When exposed to high temperatures, free quartz can change crystal structure to form tridymite (above 870 °C) or cristobalite (1470 °C) which have greater health hazards than quartz.

INCOMPATIBILITY: (Materials to avoid) - None

HAZARDOUS POLYMERIZATION: Will not occur

SECTION VII. SPILL, LEAK, AND DISPOSAL INFORMATION

ACTION TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Clean up and collect, minimizing dust. Do not exceed recommended PEL or TLV. Avoid Breathing Dust. Wear approved respirator.

WASTE DISPOSAL METHOD: Follow federal, state and local regulations for solid waste disposal. Under RCRA (40 CFR Part 261) feldspar is not a hazardous waste.

COMMUNITY RIGHT TO KNOW: California's Proposition 65 lists crystalline silica as a carcinogen.

OTHER PRECAUTIONS: Use good hygiene practices. Wash hands prior to eating.

SECTION VIII. SPECIAL PROTECTION INFORMATION

VENTILATION: Recommended method.

RESPIRATORY PROTECTION: If dust concentrations exceed recommended PEL or TLV for short time durations, use NIOSH/MSHA approved dust respirators. If spraying wet coatings, use NIOSH/MSHA dust/mist respirators.

EYE PROTECTION: Wear tight fitting goggles if high dust concentrations exist. NIOSH recommends that contact lenses not be worn when working with crystalline silica.

- OTHER:**
1. Dust exposure levels in excess of appropriate PEL or TLV should be reduced by feasible engineering and/or administrative controls.
 2. It is recommended that the employer obtain a copy of the ASTM E 1132 information package, "Standard Practice of Health Requirements Relating to Occupational Exposure to Quartz Dust".
 3. Government regulations require that exposed personnel receive appropriate training in safe work habits when working with crystalline silica where the potential exists for exceeding the PEL or TLV.

SECTION IX. SPECIAL PRECAUTIONS

Minimize dust generation and exposure. Do not breathe dust. TWA should not exceed TLV or PEL.

ACGIH recommends periodic physical examinations for those employees who are exposed to respirable crystalline silica levels greater than 50% of the TLV or PEL.

Manufacturers who crush or grind ceramic bodies fired to high temperatures should recognize possible presence of tridymite and/or cristobalite which have greater health hazards than quartz.

Feldspar is not hazardous under DOT regulations.

Data, information and recommendations recorded herein are believed to be accurate. K-T Feldspar Corporation makes no warranty, either expressed or implied, with respect thereto and disclaims all liability from reliance thereon. Standards may vary in different non-U.S. jurisdictions. Follow applicable guidelines.