MATERIAL SAFETY DATA SHEET

FELDSPAR

EFFECTIVE DATE: March 1, 2006 **PREVIOUS DATE:** February 3, 2003

1. IDENTIFICATION OF THE SUBSTANCE/PREP. AND THE COMPANY

PRODUCT NAME: FELDSPAR
MANUFACTURER'S NAME: The Feldspar Corporation/Zemex Industrial Minerals Inc.
ADDRESS: 1040 Crown Pointe Parkway – Suite 270, Atlanta GA 30338
PHONE NO.: (770) 392-8660 8am–5 pm EST
FAX NO.: (770) 392-8670

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: Feldspar **PRODUCT NAMES**: SP-GF-20, G-20, G-40, G-200, G-325, NC-4, FELEX (VARIOUS)

CHEMICAL FAMILY: Aluminum Silicate
FORMULA: (Na,K,Ca) Al Si_3 Og; SiO_2
WEIGHT: Feldspar 90-94 % approx. **CAS No:** 68476-25-5
Crystalline Silica (Quartz) SiO_2 6-10% **CAS No**: 14808-60-7

3. HAZARDS IDENTIFICATION

Feldspar is a naturally occurring anhydrous, inorganic, igneous rock. It is a complex aluminum silicate containing varying amounts of sodium, potassium, and calcium. Feldspar contains crystalline silica levels of 6 to 10%.

- **CARCINOGENICITY:** This product contains 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, Some Silicates, Coal Dust and Para-aramid Fibrils" - Volume 68, 1997, has concluded that there is sufficient evidence of the carcinogenicity of crystalline silica in humans, and has, therefore, classified crystalline silica in, Group 1, Carcinogenic to Humans. The National Toxicology Program's ("NTP's") Ninth Annual Report on Carcinogens 2000, lists crystalline silica (respirable) as a substance which is known to be a human carcinogen. In humans, a number of studies have found an association between lung cancer and exposure to dust containing respirable crystalline silica. In many of these studies, though not all, lung cancer risks were elevated and could not be explained by confounding factors such as cigarette smoking or arsenic or random inhalation. While the IARC working group concluded there was sufficient evidence in humans for the carcinogenicity of inhaled crystalline silica in the form of quartz or crystobalite, it noted that carcinogenicity in humans was not detected in all circumstances studied.
- **Note:** The state of California requires the following statement:
"Airborne particles of respirable size of crystalline silica are known to the State of California to cause cancer"

4. FIRST AID MEASURES

SKIN CONTACT ABSORPTION: Inflammation from contact with open cuts may occur. Wash thoroughly with water.
INHALATION: 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. If inhalation occurs move to fresh air, consult physician and/or obtain competent medical assistance as necessary.
EYE CONTACT: Wash eyes with large amount of water or saline solution. If irritation or redness develops, get medical attention.
INGESTION: Consult physician and/or obtain competent medical assistance

5. FIRE-FIGHTING MEASURES

Feldspar is not flammable.

6. ACCIDENTAL RELEASE MEASURES

Feldspar waste is not reactive, flammable or biodegradable. Use conventional means; e.g. sweeping, vacuum, etc.

7. HANDLING AND STORAGE

Avoid dust formation. Keep container tightly closed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OSHA PEL	ACGIH TLV	NIOSH TWA
Crystalline Quartz	Crystalline Quartz	Crystalline Quartz
RESPIRABLE 0.1 mg/m^3 (TWA-TLV)	RESP. 0.025 mg/m^3 (TWA-TLV)	RESP. 0.05 mg/ m^3 (TWA-TLV)

RESPIRATORY PROTECTION: Use NIOSH/MSHA/OSHA approved dust respirator if dust is present.
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.
PROTECTIVE GLOVES & EYE PROTECTION: Impermeable gloves and Eye protective glasses are recommended. NIOSH recommends against wearing contact lenses when working with crystalline silica.

9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT: 1100-1450°C
SOLUBILITY IN WATER: Negligible
BOILING POINT: N/A
ODOR: Earthy smell when wet
SPECIFIC GRAVITY (WATER=1): 2.60-2.65
% VOLATILE BY VOL: Non-Volatile
APPEARANCE: White to tan granules and/or powder
VAPOR PRESSURE: N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable
CONDITIONS TO AVOID: None
MATERIALS TO AVOID: None Expected
HAZARDOUS DECOMPOSITION PRODUCTS: None

11. TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS (ACUTE & CHRONIC): May cause eye and skin irritation. Ingestion may cause gastrointestinal irritation, nausea and diarrhea. Long term exposure to high amount of feldspar without the approved dust mask may cause chronic cough, silicosis and cancer.

12. ECOLOGICAL INFORMATION

Ecotoxicity Effects: No known effect on environment or expected under normal use.

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Feldspar is not a hazardous waste under RCRA (40 CFR Part 261) Use normal solid waste disposal methods to comply with Federal, State and local regulations.

14. TRANSPORT INFORMATION

Not classified as dangerous material by DOT. No special precautions are required.

15. REGULATORY INFORMATION

Canadian WHMIS: Hazardous product, D2A
CANADIAN DOMESTIC SUBSTANCES LIST: As a naturally occurring substance, Feldspar is considered to be on the Canadian DSL.
PNCA/CPMA HMIS RATING: Health (2) Flammability (0) Reactivity (0) Personal Protection (E)
U.S. CALIFORNIA PROPOSITION 65: This product contains materials regulated under **California's Safe Drinking Water and Toxic Enforcement Act of 1986**.

16. OTHER INFORMATION

PREPARED BY: JOE ANTONACCI/AHSAN KHAN, ZEMEX TECHNICAL SERVICE DEPARTMENT
ZEMEX INDUSTRIAL MINERALS, 1475 Graham Bell, Boucherville, Quebec, Canada J4B 6A1
TELEPHONE NO.: (450) 655-2450
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