#3098, 3105, 3108, 3110

MATERIAL SAFETY DATA SHEET KINGS MOUNTAIN MICA

46-609

EFFECTIVE DATE: March 20, 2006

REGULATORY COMPLIANCE:

•EU-directive 2002/95/EC (RoHS)

•EC-directive 93/112/EC & 91/155/EC

•EC 67/548 (R51) & (R53)

PREVIOUS ISSUE: April 27, 2005

•US OSHA Hazard Communication Standard CFR 1910.1200

•Canadian WHMIS •US OSHA Hazard Communication Standard CFR 1910.1200

•British Legislation, CHIP

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

PRODUCT NAME: KINGS MOUNTAIN MICA

MANUFACTURER'S NAME: KINGS MOUNTAIN MINING, L.L.C.

ADDRESS: 1469 South Battleground Avenue, Kings Mountain, North Carolina, USA 28086 PHONE NO.: (704) 734-3550

2. COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME: Muscovite Mica PRODUCTS NAME: H-360, HAR-160, HiMod-270, HiMod-360, HiMod 370,

HiMod 290 S-360, WG-160, WG-325, 1-K, 4-K, 4-KLE, 100-K, FS-255, F-260, L-105, 20-K, L-125, L-135, L-140, L-140F, F-120, Mica Concentrate, C-500, C-1000, C-3000,

C-4000, HiMod-450, L-477, C-3000-C

CHEMICAL FAMILY: Silicate Minerals

CAS No.: 12001-26-2

FORMULA: KAl₂Si₃O₁₀ (OH)₂·5H₂O WEIGHT: 95-99.9 %

Crystalline Silica (Quartz) SiO₂ CAS No: 14808-60-7 WEIGHT: 0.1-5.0%

3. HAZARDS IDENTIFICATION

• Kings Mountain mica is an inorganic mineral. It is an abundant silicate comprising many inorganic elements. It may contain a small amount of crystalline silica (Quartz). Typical levels may vary between 0.1% to 5 %

- 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"

Controlled average exposures over a working day to 3 mg/m³ of respirable dust or less should be adequate to protect employee's health. Brief or occasional exposure should not cause any more concern than would exposure to other relatively inert dusts.

4. FIRST AID MEASURES

No special procedures are required. Some eye, mucous membrane and skin sensitivity may occur with allergic individuals. First aid consists of washing away dust. In case of discomfort by dust, move to a ventilated area and consult a physician.

Eyes: Wash eyes with large amount of water or saline solution. If irritation or redness develops, get medical attention.

Ingestion: Give large quantities of water to induce vomiting, keep head lower than hips to prevent aspiration. Get medical attention.

5. FIRE-FIGHTING MEASURES

Mica is inert and non-flammable.

6. ACCIDENTAL RELEASE MEASURES

Mica waste is non-reactive, non-flammable, non-biodegradable. Use conventional means for clean-up; e.g. sweeping, vacuum, etc. Use caution on wet floor, as it may be slippery.

7. HANDLING AND STORAGE

Avoid dust formation. Keep container tightly closed.

8. EXPOSURE CONTROL/PERSONAL PROTECTION

OSHA PEL ACGIH TLV

Mica: 20 mppcf (3 mg/cu. meter) (Respirable) 3 mg/cu. meter (TWA-8 Hours Period)

Ouartz: (Respirable) 0.1 mg/cu. meter/%Si₂ (Respirable) 0.025 mg/cu. meter

The exposure limits of Mica are shown in Table Z-3-Mineral Dust, published by OSHA (29 CFR 1910.1000) USA

RESPIRATORY PROTECTION: NIOSH approved dust respirator should be used when level exceeds TLV.

VENTILATION: Normal air circulation, use adequate ventilation for low TLV.

LOCAL EXHAUST: Collect excessive dust at point of generation

PROTECTIVE GLOVES & EYE PROTECTION: Impermeable gloves and eye protective glasses are recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

DECOMPOSITION POINT: ~1000° C (1832° F) SPECIFIC GRAVITY (WATER=1): 2.8 g/cc

SOLUBILITY IN WATER: Insoluble

pH (10 % aqueous sol): 7~8

HARDNESS: 2.5 - 3 MOHS **ODOR:** Odorless

APPEARANCE: White/buff powder

EVAPORATION RATE (BUTYL ACET.=1): N/A

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable

CONDITIONS TO AVOID: None

MATERIALS TO AVOID: Strong acids and alkalis 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 mica without the approved dust mask may lead to chronic cough, dyspepsia or respiratory dysfunction.

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Use normal solid waste, disposal methods to comply with Federal and local laws.

14. TRANSPORT INFORMATION

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

15. REGULATORY INFORMATION

AUSTRALIA ACOIN: Mica is on the list

CANADIAN WHMIS: Mica with less than 1% silica is considered an uncontrolled product according to WHMIS classification criteria

CANADIAN DOMESTIC SUBSTANCES LIST: As naturally occurring substance mica in on the list

ECC DIRECTIVE: Packaging Code EEC 67/548 (R 51) & (R 53)

JAPAN MITI INDEX: Mica is not on the list

U.S. CALIFORNIA PROPOSITION 65: Mica is not on the list. However, Mica may contain ppm quantities of materials regulated under California's Safe Drinking Water and Toxic Enforcement Act of 1986.

U.S. CERCLA: 40 CFR Part 302, Table 302.4

Mica is not listed. Notification of the spill is not required.

U.S. EPA- TCLP: 40 CFR Part 261-24, appendix II-- Table 1, No noticeable amount of Toxic substances leaches out. U.S. RCRA: Mica is not classified as a hazardous waste under Section 3001 of RCRA, and under regulation

U.S. SARA TITLE III: This product is not subject to SARA Title III (40 CFR Part 372)

U.S. TSCA CHEMICAL SUBSTANCES INVENTORY: Mica is listed, CAS # 12001-26-2

Conformance of Mica to FDA regulations: Please note that mica meets the FDA criteria covering the safe use of mica in articles intended for food contact use. Mica is listed in the Code of Federal Regulations; Title 21 "Food and Drugs" parts 175 and 177 under "Indirect Food Additives":

175.105.5, 175.300(b)(3)(xxvi), 176.170,176.180, 177.1210, 177.1350.a.3, 177.1460, 177.1520(b), 177.2600.(C.4(v)),

16. OTHER INFORMATION

NPCA / CPMA HMIS Ratings: HEALTH:

REACTIVITY: 0

1

FLAMMABILTY:

PERSONAL PROTECTION:

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Chicago, IL 60606 877-427-4255

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Revision 1

Page 2 of 2

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