

# Material Safety Data Sheet

## KINGS MOUNTAIN MICA

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Oglebay Norton Specialty Minerals

Issued: 07/31/2000

Replaces: 12/01/1999



### 1. PRODUCT IDENTIFICATION

Manufacturer:

Oglebay Norton Specialty Minerals  
P.O. Box 729  
Kings Mountain, NC 28086  
704-739-3616  
704-739-7888 fax

Emergency Phone:  
Chemtrec  
800-424-9300

Synonyms:

(Silicate, Mica), Muscovite Mica, Micro Mica, Dry Ground Mica,  
Wet Ground Mica

Product Names:

Wet Ground Mica:

Dry Ground Mica:

Flake Mica:

Micro Mica:

H-360, HAR-160, HiMod-270, HiMod-360, S-360, WG-160, WG-325  
1-K, 4-K, 4-KLE, 100-K, FS-255  
20-K, -125, L-135, L-140, F-120, F-260  
C-500, C-1000, C-3000, C-4000, HiMod-450

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Formula:

$KAl_2Si_3O_{10}(OH)_2 \cdot 5H_2O$

Chemical Family:

Silicate Minerals

C.A.S. No.:

12001-26-2 (Listed as Silicate, Mica)

Canadian Product ID No.:

None Listed

Product Use:

Industrial Manufacturing

### 3. HAZARD IDENTIFICATION

Labeled in accordance with OSHA'S Hazard Communication Rule and the HMIS Rating System developed by the National Paint and Coatings Association, 1500 Rhode Island Ave. N. W., Washington, D.C. 20005.

#### O.S.H.A./H.M.I.S. LABEL

HEALTH\* = 0

FLAMMABILITY = 0

REACTIVITY = 0

PERSONAL PROTECTION EQUIPMENT= E\*

No acute effects

Non-flammable

Non-reactive

Dust Mask

\* See Material Safety Data Sheet. Prolonged breathing of excessive dust may adversely affect lung function. Use NIOSH approved dust mask for dusty conditions.

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### 4. FIRST AID MEASURES

#### Eyes:

Immediately flush the eyes with plenty of water for at least fifteen minutes. If irritation occurs or persists, obtain medical attention.

#### Inhalation:

Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. If irritation occurs and persists, obtain medical attention.

### 5. FIRE FIGHTING MEASURES

**National Fire Protection Code 704:** Fire (Red) (0), Health (Blue) (0), Reactivity (yellow) (0)

**Physical Hazard:** Non-combustible

**Flammability in Air:** Not applicable

**Flash Point:** Not applicable

**Autoignition Temperature:** Not applicable

**Extinguishing Media:** Any suitable for fire in surrounding area

**Special Fire Fighting Procedure:** Not applicable

**Explosion Data:** Non-explosive

**Unusual Fire & Explosion Hazard:** None

**Incompatibility:** None

**Hazardous Combustion Products:** Not applicable

**Sensitivity to Mechanical Shock:** Not applicable

**Sensitivity to Static Discharge:** Not applicable

**Conditions of Reactivity:** None

**Hazardous Decomposition Products:** Not applicable

**Conditions Contributing to Instability:** None

**Conditions Contributing to Hazardous Polymerization:** Does not polymerize

### 6. ACCIDENTAL RELEASE MEASURES

None, A spill can be sprayed with water to suppress dust and then either washed away or shoveled into a suitable disposal container. (See 13. Disposal Consideration)

### 7. HANDLING AND STORAGE

Do not breathe dust and avoid getting in eyes.

Keep container closed.

Use with adequate ventilation.

Drying and/or grinding may increase dusting hazards

Control dust levels in the work place.

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### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

**Personal Protection Equipment:**

**Respiratory:** Wear a NIOSH/MSHA approved respirator when adequate ventilation is not available.

**Eyes:** Safety glasses or goggles

**Gloves:** None

**Footwear:** No special type indicated.

**Clothing:** No special type indicated.

**Others:** None.

**Ventilation Requirements:** Provide adequate ventilation to maintain below exposure limits (Section III) for quartz and mica.

**Ingredient Exposure Limits:**

TLV Data

<u>Material</u>	<u>C.A.S. No.</u>	<u>Wt. %</u>	<u>PEL</u> (OSHA)	<u>TWA</u> (ACGIH)	<u>STEL</u> (ACGIH)	<u>Ceiling</u> (OSHA)	<u>IDLH</u> (OSHA)
Mica	12001-26-2	95.0 to 99.9	20 mppcf	3 mg/M <sup>3</sup> (1)	No applicable information was found.		
Quartz	14808-60-7	0.1 to 5.0	10 mg/M <sup>3</sup> + (% SiO <sub>2</sub> +2) Ref. (2)	0.1 mg/M <sup>3</sup> (1)	No applicable information was found		50 µg/M <sup>3</sup> (3) 10 hr TWA

- (1) Respirable Dust--See Threshold Limit Value and Biological Exposure Indices for 1991-1992, ACGIH
- (2) Respirable Quartz--See 29 CFR § 1910.1000 Table Z-1-A, Air Contaminants.
- (3) Respirable Free Silica

**Ingredient Animal Test Data**

<u>Material</u>	<u>Canadian PIN</u>	<u>LD50</u> <u>Species and Route</u>	<u>LC50</u> <u>Species and Route</u>
Mica	None listed	No applicable information was found	
Quartz	None listed	No applicable information was found	

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid
Vapor Density:	Not applicable (Air = 1)
Appearance and Odor:	Odorless white powder
Vapor Pressure:	Not applicable
Odor Threshold:	Not applicable
Boiling Point:	Not applicable
Melting Point:	Decomposes without melting near 1000°C (1832 °F)
Density/Specific Gravity	2.8 g/cc
pH (as is) @ 25°C:	Not applicable
pH (1% Slurry) @ 25 °C:	Not applicable
Coefficient of Water/Oil Distribution:	Not applicable

### 10. STABILITY AND REACTIVITY

Stability:	Stable
Solubility in Water:	Insoluble (% by wt. @ 25 °C (77°F))
Volatiles:	Not applicable
Evaporation Rate:	Not applicable (Butyl Acetate = 1)

### 11. TOXICOLOGICAL INFORMATION

**Product Health Hazard:** OSHA/ARC STATEMENT  
This material contains crystalline silica. Some researchers have reported evidence that it is carcinogenic in humans following prolonged and repeated inhalation. Prolonged and repeated breathing of dust can cause silicosis.

<b>Route (s) of Exposure:</b>	<b>Hazard</b>	<b>Product Tox Data and Reference</b>
<b>Eye Contact:</b>	This substance may irritate the eyes.	No animal toxicology data available
<b>Inhalation:</b>	Respirable particles of quartz are hazardous to inhale.	No animal LC50 toxicology data is available
<b>Effects of Overexposure:</b>		
<b>Acute Effects:</b>	Possible irritation to the eyes.	
<b>Chronic Effects:</b>	Respiratory irritant. Chronic lung damage, scar tissue development in lungs can occur if inhaled over an extended period of time. Follow TLV	exposure limits, Section III.

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### 11. TOXICOLOGICAL INFORMATION (continued)

#### Product Health Hazard:

#### Carcinogenicity:

#### OSHA/IARC STATEMENT

This material contains crystalline silica. Some researchers have reported evidence that it is carcinogenic in humans following prolonged and repeated inhalation. Prolonged and repeated breathing of dust can cause silicosis.

NTP Annual: Not listed.

IARC Monograph:

Crystalline silica is listed as a carcinogen to animals and there is limited evidence for the carcinogenicity to humans, Group 1

OSHA 29 CFR Part 1910 Subpart Z: Not listed

ACGIH (Appendix A): Not listed

#### Irritancy:

Respiratory irritant per OSHA, ACGIH and NIOSH and Canadian WHMIS

**Sensitization:** No information available

**Teratogenicity:** No information available

**Mutagenicity:** No information available

**Toxicologically Synergistic Products:** No information available

#### Any Medical Conditions Generally Recognized as Being Aggravated by Exposure:

Prior existing lung or respiratory illness

### 12. ECOLOGICAL INFORMATION

**Ecotoxicity** Not know to have negative effects on the environment.

### 13. DISPOSAL CONSIDERATION

**Procedure for Release or Spill:**  
container.

Wet with water to reduce dusting and collect in a suitable

**Waste Disposal Method:**  
regulations.

Dispose of waste according to federal EPA state and local

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### 14. TRANSPORTATION INFORMATION

#### Domestic:

DOT Proper Shipping Name: Mica  
DOT Classification: None  
DOT Labels: Mica  
DOT Marking: None  
DOT Placard: None  
UN Number: None

#### Foreign:

IMCO Proper Shipping Name: Mica  
IMCO Hazard Classification: None  
IMCO Labels: Mica  
IMCO Marking: None

49 STCC Number: None

#### Emergency Accident:

Precautions and Procedures: None

Precautions to be taken in Transportation: No special precautions

### 15. REGULARITY INFORMATION

#### USA:

##### TSCA:

As a naturally occurring substance, mica is automatically included in the inventory under regulation 40 CFR 710.4, chapter 1, subsection b (7/1/86). See EPA TSCA section 8 (e) Status Report 8EHQ-0986-0632. Also, see EPA TSCA test submission (TSCATS) data base, September, 1993.

##### OSHA:

PEL 8H TWA 20 mppcf, respirable dust. FEREAC 54, 2923, 89  
PEL Final 8H TWA 3 mg/m<sup>3</sup> respirable dust. FEREAC 54, 2923, 89

##### NIOSH Criteria Documents:

Relative to silicates. (< 1% Crystalline Silica): Mica in air: 10H TWA 3 mg/m<sup>3</sup>  
NIOSH DHHS #92-100, 92  
NOHS 1974: Hazard 48535; NIS 135; TNF 12333; NOS 98; TNE 169296  
NOHS 1983: Hazard X1564; NIS 2; TNF 9; NOS 3; TNE 296

##### ACGIH:

TLV-TWA 3 mg/m<sup>3</sup>, respirable dust. 85INA8 5, 413, 86

##### MSHA:

Air TWA 20 mppcf. DTLWS 3, 33, 73

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### 15. REGULARITY INFORMATION (Continued)

**FDA Regulations:** Mica is permitted in the following applications:

Food additives by direct listing .....	\$182.99 (now EPA 40 CFR 180.1001)
Adhesives .....	\$175.105.5
Resinous and Polymeric Coatings .....	\$175.300.3
Rubber articles intended for repeated use. ....	\$177.2600
Components of paper and paperboard in contact with aqueous and fatty food .....	\$176.170
Closures with sealing gaskets for food containers .....	\$177.1210
Ethylene-vinyl acetate copolymers .....	\$177.1350
Melamine-formaldehyde resins in molded articles by cross reference to #175.300.....	\$177.1460
Components of paper and paperboard in contact with dry food by cross reference to #176.170 .....	\$176.180
Color additive in cosmetics .....	\$73.1496 and #73.2496
Olefin polymers in contact with food .....	\$177.1520

This regulation states that food contact articles may include substances that meet FDA prior approval.

#### CANADA:

**Ontario 309 & Quebec--Class 1 Annexe III:** Mica complies with the regulations. Mica is an inert product. No hazardous compound or ions leach from mica during normal processing.

#### **WHMIS:**

**Hazard Classification**

Class D, Division 2, Subdivision A

**Disclosure List:**

Mica and silica are both listed (1% each)

**Domestic Substances List (DSL):**

Mica is on this list

#### JAPAN:

Mica is not listed in the MITI index. Substances controlled by this law are substances obtained by the chemical reactions of an element or a chemical compound. Mica is therefore exempted from regulation by this law.

#### AUSTRALIA:

Mica is listed in the ACOIN C.A.S. Registry number section as mica group minerals, 12001-26-2. TWA 2.5 mg/m<sup>3</sup>

#### BELGIUM:

Mica TWA 3 mg/m<sup>3</sup>

#### THE NETHERLANDS:

Mica TWA 5 mg/m<sup>3</sup>

#### SWITZERLAND:

Mica TWA 3 mg/m<sup>3</sup>

#### UNITED KINGDOM:

Mica TWA 1 mg/m<sup>3</sup> respirable dust; 10 mg/m<sup>3</sup> total dust

#### BULGARIA, COLOMBIA, JORDAN, KOREA, NEW ZEALAND, SINGAPORE, VIET NAM:

TLV-TWA 3 mg/m<sup>3</sup>, respirable dust

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### **16. OTHER INFORMATION**

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none

The information contained in this Material Safety Data Sheet is believed to be reliable. No guarantee is implied or expressed regarding the accuracy of this information or the use of these mica products since the conditions for use are beyond our control. Nothing contained herein should be construed as a recommendation to use this product in conflict with existing patents covering any material or its use.

---End of MSDS---