

MATERIAL SAFETY DATA SHEET

MSDS No.: 013C-UC

////////////////////////////////////SECTION I: PRODUCT INFORMATION////////////////////////////////////

 Identity (As used on Label and List) APEXSM, MINEXSM and various ceramic and glass grade designations

Nepheline Syenite

Manufacturer's Name

UNIMIN CANADA LTD.

 Emergency Telephone Number
(416) 232-2003

Address: Number, Street, City, State and ZIP Code

5343 Dundas St. West, Suite 400

Etobicoke, Ontario, Canada M9B 6K5

Supplier:

Address:

Emergency Telephone:

////////////////////////////////////SECTION II: PREPARATION INFORMATION////////////////////////////////////

Telephone Number for Information

(416) 232-2003

Date Prepared:

May 20, 1992

Prepared By:

Legal Department

////////////////////////////////////SECTION III: HAZARDOUS INGREDIENTS////////////////////////////////////

 Components: [Specific Chemical Identity: (Na,K) AlSi₃O₈ - Nepheline, NaAlSi₃O₈ - Albite, KAlSi₃O₈ - Microcline]; Common Name(s): Nepheline Syenite, an inorganic feldspathic mineral, CAS# 37244-96-5.

Not known to contain any hazardous components.

 LD₅₀: Not Applicable

 LC₅₀: Not Applicable

////////////////////////////////////SECTION IV: PHYSICAL DATA////////////////////////////////////

Boiling Point: Not Applicable

 Specific Gravity (H₂O=1): 2.61

Vapor Pressure (mm Hg.): Not Applicable

Melting Point: 1223°C/2233.4°F

Vapor Density (AIR=1): Not Applicable

Evaporation Rate (Butyl Acetate=1): Not Applicable

Solubility in Water: Negligible

Freezing Point: Not Applicable

pH: 9.9

Appearance and Odor: White -- Odorless

Coefficient of water/oil distribution: Not Applicable

Odor Threshold: Not Applicable

////////////////////////////////////SECTION V: FIRE AND EXPLOSION HAZARD DATA////////////////////////////////////

Flash Point (Method Used): Fully oxidized, will not burn.

Flammable Limits: Fully oxidized, will not burn.

LEL: Fully oxidized will not explode.

UEL: Fully oxidized, will not explode.

Extinguishing Media: Fully oxidized, will not burn.

Hazardous Combustion Products: None

Special Fire Fighting Procedures: None

Auto Ignition Temperature: Not Applicable.

Explosion Data - Sensitivity to Mechanical Impact or Static Discharge: None

Conditions of Flammability: None

Section VI: Reactivity Data

Stability: Stable
Conditions to Avoid: None
Incompatibility (Materials to Avoid): None
Hazardous Decomposition or Byproducts: None
Hazardous Polymerization: Will not occur
Conditions to Avoid: Not Applicable

SECTION VII: TOXICOLOGICAL PROPERTIES

Route(s) of Entry: Inhalation? Yes Skin? No Ingestion? No
Health Hazards (Acute and Chronic): Excessive or prolonged inhalation of dust may result in harm or injury to the respiratory system.
Carcinogenicity:
NTP? No
IARC Monographs? No
OSHA Regulated? No
Reproductive Toxicity: None
Teratogenicity: None
Mutagenicity: None
Toxicologically Synergistic Products: None
Sensitization: Not Applicable
Effects and Symptoms of Chronic Exposure: Symptoms of excessive exposure include shortness of breath and reduced pulmonary function.
Effects and Symptoms of Acute Exposure: This inert material is not known to represent an acute toxic hazard.
Irritation and Medical Conditions Generally Aggravated by Exposure: Individuals with pulmonary and/or respiratory disease, including, but not limited to, asthma and bronchitis, or subject to eye irritation, should be precluded from exposure.
Exposure Limits:

Table with 4 columns: Material, O.Reg 654-86 and WEG-TWA, ACGIH TLV, OSHA PEL. Row 1: Nepheline Syenite, 10mg (Total particulates not otherwise classified), 10mg/m³ (Total particulates not otherwise classified), -none established-

See Threshold Limit Value and Biological Exposure Indices, American Conference of Governmental Industrial Hygienists.

SECTION VIII: PREVENTIVE MEASURES

Steps to Be Taken in Case Material Is Released or Spilled: If uncontaminated--collect, using dustless method (water or vacuum). If contaminated--use appropriate method in light of nature of contamination. Use appropriate container.
Waste Disposal Method: If uncontaminated, dispose as an inert, non-metallic mineral. If contaminated--use appropriate method in light of contamination in accordance with applicable law.
Handling Procedures, Storage Requirements and Shipping Information: Take normal precautions against bag breakage or spills of bulk material. Avoid creation of respirable dust.

Other Precautions:

Use adequate ventilation and dust collection. Do not permit dust to accumulate in work area. Maintain and use proper and clean respiratory equipment. Clean clothing which has become dusty. See Section VII. WARN and TRAIN your EMPLOYEES and WARN your CUSTOMERS (in the event of resale) in accordance with all applicable "Right to Know" laws and regulations.

Personal Respiratory Protective Equipment:

Use conventional particulate respiratory protection based on considerations of airborne concentrations and duration of exposure. See most recent standards of the American National Standard Institute (ANSI Z.88.2), the Occupational Safety and Health Administration (OSHA) (29 CFR Part 1910.134), the Mine Safety and Health Administration (MSHA) (30 CFR Part 56) and the National Institute for Occupational Safety and Health (NIOSH) (NIOSH Pocket Guide to Chemical Hazards).

Specific Engineering Controls/Ventilation:

- Local Exhaust: To meet PEL requirements
- Special: Not Applicable
- Mechanical (General): To meet PEL requirements
- Other: To meet other PEL requirements

Protective Gloves: Recommended

Eye Protection: Recommended

Other Protective Clothing or Equipment: As appropriate in light of specific application.

Work/Hygienic Practices: Avoid creating and breathing dust.

//////////////////////////////////SECTION IX: EMERGENCY AND FIRST AID PROCEDURES//////////////////////////////////

Emergency and First Aid Procedures: Eyes---Flush with running water. Gross Inhalation---Remove to fresh air. Give oxygen with artificial respiration as needed. Seek medical attention for treatment, observation and support as needed.

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