

MATERIAL SAFETY DATA SHEET

Date Revised: 06/28/2006

I. PRODUCT IDENTIFICATION

IDENTITY: Portland Cement (ASTM Type I/II, III, V, Block, Plastic, PV, R-2, I-P, Fast Set, Low Heat)

Classification:
Cement, Stabilizer

Supplier: DIVERSIFIED MINERALS INC.
1135 E. Wooley Rd.
Oxnard CA, 93030
(805) 247-1069 - Toll Free (888) 364-9595

Poison Center: (800) 356-3129

II. PRODUCT FORMULA/INGREDIENTS

<u>Major Constituents:</u>	<u>CAS Numbers:</u>	<u>TLV</u>
3CaO-SiO ₂	11168-85-3	5 mg/m ³
2CaO-SiO ₂	10034-77-2	5 mg/m ³
3CaO-Al ₂ O ₃ -Fe ₂ O ₃	12042-78-3	5 mg/m ³
4CaO-Al ₂ O ₃ -Fe ₂ O ₃	12068-35-8	5 mg/m ³
CaSO ₄ -XH ₂ O	13397-24-5	5 mg/m ³

Trace Elements: Portland cements are made from materials mined from the earth and are processed using energy provided by fuels. Trace amounts of naturally occurring materials might be detected during chemical analysis. Such as small amounts of MgO, K₂OSO₄, CaO and Na₂SO₄ may be present.

III. PHYSICAL DATA

Odor and Appearance:	Wet stone odor, gray fine powder.		
Boiling Point:	Not applicable	Evaporation Rate:	Not applicable
Vapor Pressure:	Not applicable	Specific Grav. (H ₂ O = 1):	3.15
Water Solubility:	Slight (0.1 - 1.0%)	Melting Point:	Not available
Vapor Density (Air = 1):	Not applicable	Volatile by Volume:	0%
pH of Saturated Solution:	Approximately 12.0	Est. weight (per 1/ft ³):	94 lb/ft ³

IV. FIRE AND EXPLOSION DATA

Flash Point:	Not applicable
Flammable Limits:	Not applicable
Flammable/Combustible Liquid Classifications:	Not applicable
Extinguishing Media:	Not applicable
Unusual Fire or Explosion Hazards:	None
Auto-Ignition Temperature:	Not applicable
Special Fire-Fighting Procedures:	Not applicable

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V. HEALTH HAZARDS

SUMMARY: Inhalation of dust should be avoided. The constituents may cause irritation of eyes, skin, and respiratory tract. Ingestion may cause irritation of gastrointestinal tract.

Threshold Limit Value (TLV): Respirable Dust - 2 mg/m³. Total Dust - 10 mg/m³. 30 million Particles/ft³.

Acute Health Effects: Irritation of eyes, skin, nose, throat, and upper respiratory tract.

Primary Entry Routes: Inhalation or ingestion.

VI. REACTIVITY DATA

Chemical Incompatibility: Strong acids and Fluorine.

Decomposition Products: Oxides and Carbon Dioxide.

VII. SPILL OR LEAK PROCEDURES

Procedures for Spills: Avoid creation of excessive dust. Wear appropriate personal protective equipment as described in Section VIII, if potential for exposure to excessive dust concentrations.

Waste Management: Use for intended purpose, if possible, otherwise material should be disposed of in accordance with all federal, state, and local regulatory requirements. Take appropriate precautions to prevent excessive exposure to dust by transport or disposal site personnel.

VIII. SPECIAL PROTECTION INFORMATION

Goggles: Tight-fitting safety goggles should be worn by persons handling this material where ventilation is inadequate.

Skin Protection: Use barrier creams, gloves, boots and clothing to protect the skin from prolonged contact.

Respirator: An appropriate NIOSH approved respirator should be worn where ventilation is inadequate or dust concentration may exceed TLV.

Ventilation: Use local or general exhaust ventilation to keep dust levels as low as possible.

Other: Engineering controls and operating procedures should be designed to reduce airborne dust concentrations to a minimum.

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IX. SPECIAL PRECAUTIONS

Storage Segregation Hazard Classes:	Alkaline
Special Handling Storage:	Avoid storage with incompatible materials noted in Section VI.
Special Workplace Engineering Controls:	Work practices should minimize dust. Refer to Section VIII.

X. ABBREVIATIONS

OSHA - Occupational Safety & Health Administration	NTP - National Toxicology Program
NIOSH - National Institute for Occupational Safety & Health	CAS - Chemical Abstract Service
IARC - International Agency of Research on Cancer	TLV - Threshold Limit Values

Disclaimer of Liability Notice and Prop. 65 Notice:

This MSDS was prepared, and is to be used only for this product. If this product is used as a component to, or in association with other product(s), or processes, this MSDS information may not be applicable. It is the responsibility of the User(s), or Final Recipient(s) of this product, to distribute this MSDS to employees and personnel.

The conditions or methods of handling, storage, and use of this product are beyond our control and may be beyond our knowledge. FOR THIS AND OTHER REASONS, DMI AND ASSOCIATED COMPANIES DO NOT ASSURE RESPONSIBILITY AND EXPRESSLY DISCLAIM LIABILITY FOR LOSS OR DAMAGE, OR EXPENSE ARISING OUT OF OR IN ANY WAY CONNECTED WITH THE HANDLING, STORAGE, OR USE OF THIS PRODUCT.

While Portland Cement is not listed as a carcinogen by NTP, IARC, or OSHA. It may, however, contain trace metal compounds are listed on the NTP and IARC lists of carcinogens.

Proposition 65 Notice: **WARNING:** This product or area of its manufacture contains chemicals known to the State of California to cause cancer, birth defects, or other reproductive harm.

NIOSH conducted a study, "The mortality of U.S. Portland Cement and Quarry Workers" (March 1985) which found: "There is no excess mortality from all causes of death, lung cancer, non-malignant respiratory disease, or ischemic heart disease" among workers studied.

This Warning required by section 25249.6 of the California Health and Safety Code.

Prepared by: Diversified Minerals Inc., Technical Services Dept.

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