

SAFETY DATA SHEET

Conforms to OSHA HazCom 2012, CPR, NOM-018-STPS-2000 Standards & GHS

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

Product Name(s): CKD

Product Identities: CKD, Cement Kiln Dust, Kiln Dust

Supplier/Manufacturer:



Diversified Minerals Inc.
1135 E. Wooley Road
Oxnard CA, 93030
(888) 364-9595

**Poison Control System:
(800) 222-1222**

Recommended Uses: A cost effective alternative to quicklime lime and other cementitious materials. These applications include soil stabilization, waste remediation, oil field waste solidification, Bio Solids pH modifier for odor control and pathogen kill, filler in paint, asphalt and asphalt foaming. CKD has a high surface area and is commonly used in acid neutralization and solidification of low pH sludge.

Restrictions on Use: Strong Acids, Fluorine and Strong Oxidizing Agents

SECTION 2: HAZARD IDENTIFICATION

	WARNING	
	Irritant: Causes eye, skin and inhalation irritation	
	Use proper engineering controls, work practices, and personal protective equipment to prevent exposure to wet or dry product.	 
	Read SDS for details.	<p>Respiratory Protection Eye Protection</p>

GHS Classification: (Please see GHS Classifications on our website under Resources)

Skin Corrosion/Irritation - Category 1B

Eye Damage - Category 1

Skin Sensitization - Category 1B

Carcinogen- Category 2

Specific Target Organ Toxicity Repeat Exposure - Category 1

GHS LABEL ELEMENTS Symbol(s)



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS RN	ACGIH TLV (mg/m ³)	OSHA-PEL (mg/m ³)
Limestone (Calcium Carbonate)	1317-65-3	10 mg/m ³	15 mg/m ³ (T); 5 mg/m ³ (R)
Calcium Oxide	305-78-8	2 mg/m ³	5 mg/m ³
Silica Dioxide (amorphous)	7631-86-9	None	80 mg/m ³ / (% SiO ₂)
Gypsum (Calcium Sulfate)	13397-24-5	10 mg/m ³ (T)	15 mg/m ³ (T); 5 mg/m ³ (R)
Sulfur Trioxide	7446-11-9	0.2 mg/m ³ (as H ₂ SO ₄)	1 mg/m ³ (as H ₂ SO ₄)
Aluminum Oxide	1344-28-1	1 mg/m ³ (R) (as Al metal & insoluble compounds)	15 mg/m ³ (T) 5 mg/m ³ (R) (as Al)
Iron Oxide	1309-37-1	5 mg/m ³ (R)	10 mg/m ³ (as fume)
Magnesium Oxide	1309-48-4	10 mg/m ³ (I)	15 mg/m ³
Nuisance dust (PNOR)	None	10 mg/m ³	15 mg/m ³ (T); 5 mg/m ³ (R)
Crystalline Silica (Quartz)	14808-60-7	0.025 mg/m ³ (R)	10 mg/m ³ (R) / (% SiO ₂ + 2) 30 mg/m ³ (T) / (% SiO ₂ + 2)

SECTION 4: FIRST-AID MEASURES

Eye Contact: Rinse eyes thoroughly with water for at least 15 minutes, including under lids to remove all particles. Seek medical attention for discomfort or if irritation or other symptoms do not subside.

Skin Contact: Wash with cool water and pH neutral soap or a mild skin detergent. Seek medical attention for rash, irritation, dermatitis and prolonged unprotected exposures to wet CKD.

Inhalation: Move person to fresh air. Seek medical attention for discomfort or if coughing or other symptoms do not subside.

Ingestion: Do not induce vomiting. If conscious, have person drink plenty of water. Seek medical attention or contact poison control immediately.

SECTION 5: FIRE-FIGHTING MEASURES

Flashpoint & Method: Non-combustible

General Hazard: Avoid breathing dust.

Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Firefighting Equipment: CKD poses no fire-related hazard.

Combustion Products: In excess of 1000°C compounds will break down into their constituent oxides.

SECTION 6: ACCIDENTAL RELEASE MEASURES

- General:** Place spilled material into a container. Avoid actions that cause the CKD to become airborne. Avoid inhalation of CKD and direct contact with skin. Wear appropriate Personal Protective Equipment (PPE) as described in Section 8 below.
- Waste Disposal:** Dispose of CKD according to Federal, State, Provincial and local regulations.

SECTION 7: HANDLING AND STORAGE

- General:** Handle with care and use appropriate control measures. Keep dry until used.
- Properly ground all pneumatic conveyance systems. The potential exists for static build-up and static discharge when moving cement powders through a plastic, non-conductive, or non-grounded pneumatic conveyance system. The static discharge may result in damage to equipment and injury to workers.
- Engulfment hazard: To prevent burial or suffocation, do not enter a confined space, such as a silo, bin, bulk truck or other storage container or vessel that stores or contains CKD. CKD can build up or adhere to the walls of a confined space. The CKD can suddenly release, collapse, or fall unexpectedly.
- Housekeeping:** Avoid actions that cause CKD to become airborne during clean-up such as dry sweeping or using compressed air. Use HEPA vacuum or thoroughly wet with water to clean-up dust. Use PPE described in Section 8 below.
- Storage Temperature:** >900 °C
- Storage Pressure:** Unlimited.
- Storage Moisture:** Keep dry.
- Clothing:** Promptly remove and launder clothing that is dusty or wet with CKD. Thoroughly wash skin after exposure to CKD.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

- Engineering Controls:** Use local exhaust and general dilution ventilation or other suppression methods to maintain dust levels below exposure limits.
- Personal Protective Equipment (PPE):**
- Respiratory Protection: Under ordinary circumstances no respiratory protection is required. Wear a NIOSH approved respirator that is properly fitted and is in good condition when exposed to dust above exposure limits.
- Eye Protection: Wear ANSI approved glasses or safety goggles when handling dust or wet CKD to prevent contact with eyes. Wearing contact lenses when using CKD, under dusty conditions, is not recommended.
- Skin protection: Wear gloves, boot covers and protective clothing impervious to water to prevent skin contact. Do not rely on barrier creams, in place of impervious gloves. Remove clothing and PPE that become saturated with wet CKD and immediately wash exposed areas.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State:	Solid (powder)	Evaporation Rate:	NA
Appearance:	Tan, gray-off White	pH (in water):	11.8-12.4
Odor:	None	Boiling Point:	>1000°C
Vapor Pressure:	NA	Freezing Point:	None, solid
Vapor Density:	NA	Viscosity:	None, solid
Specific Gravity	2.6-2.8	Solubility in water:	2-20%

SECTION 10: STABILITY AND REACTIVITY

Stability:	Stable. Keep dry until use. These products may react with water, resulting in a slight release of heat, depending upon the amount of lime (Calcium oxide) present. Avoid contact with incompatible materials.
Incompatibility:	CKD is incompatible with acids and strong oxidizing agents.
Hazardous Polymerization:	None.
Hazardous Decompositions:	Will not spontaneously occur. Avoid exposure to acids. Product exposed directly to acids may release hydrogen sulfide. Hydrogen sulfide is a hazardous, toxic and poisonous gas.

SECTION 11 AND 12: TOXICOLOGICAL AND ECOLOGICAL INFORMATION

For questions regarding toxicological and ecological information refer to contact information in Section 1.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of waste and containers in compliance with Federal, State, Provincial and Local regulations.

SECTION 14: TRANSPORT INFORMATION

This product is not classified as a Hazardous material under US D.O.T or Canadian TDG regulations.

SECTION 15: REGULATORY INFORMATION

OSHA/MSHA Hazard Communication:

This product is considered by OSHA/MSHA to be a hazardous chemical and should be included in the employer's hazard communication program.

CERCLA/Superfund:

This product is not listed as a CERCLA hazardous substance.

EPCRA SARA Title III:

This product has been reviewed according to the EPA Hazard Categories promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 and is considered a "hazardous substance" a delayed health hazard.

EPRCA SARA Section 313:

This product does not contain any of the substance subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372

California Proposition 65:

WARNING: This material may contain chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

SECTION 16: OTHER INFORMATION

General Abbreviations:

>	Greater than	NIOSH	National Institute for Occupational Safety and Health
<	Lesser than	NTP	National Toxicology Program
ACGIH	American Conference of Governmental Industrial Hygienists	OSHA	Occupational Safety and Health Administration
CAS RN	Chemical Abstracts Reference Number	PEL	Permissible Exposure Limit
CERCLA	Comprehensive Environmental Response, Compensations and Liability Act	pH	Negative log of hydrogen ion
CFR	Code of Federal Regulations	PPE	Personal Protective Equipment
CL	Ceiling Limit	R	Respirable Particulate
DOT	Department of Transportation	RCRA	Resource Conservation and Reauthorization Act
g/cm ³	Grams per cubic centimeter	SARA	Superfund Amendments and Reauthorization Act
HEPA	High-Efficiency Particulate Air	SDS	Safety Data Sheet
HMIS	Hazardous Materials Identification Systems	T	Total Particulate
IARC	International Agency for Research on Cancer	TDG	Transportation of Dangerous Goods
mg/m ³	Milligrams per cubic meter	TLV	Threshold Limit Value
MSHA	Mine Safety and Health Administration	TWA	Time Weighted Average (8 hour)
NA	Not Applicable	WHMIS	Workplace Hazardous Materials Information System
NFPA	National Fire Protection Association	---	-----

This SDS (Section 1-16) was revised on July 1, 2015.

An electronic version of this SDS is available at: www.dmicement.com

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