

MATERIAL SAFETY DATA SHEET

KonCote Regular Mix

PRODUCT IDENTIFICATION

KonCote Regular

MSDS Date: 11/17/06
Emergency Telephone: Chemtrec 800-424-9300

EMERGENCY AND FIRST AID

Emergency Information

Sand Mix is a white cementitious mixture of cement and sand. When in contact with moisture in eyes or on skin, or when mixed with water, it becomes highly caustic (pH >12), and will damage or burn (as severely as third degree) the eyes or skin. Inhalation may cause irritation to the moist mucous membranes of the nose, throat, and upper respiratory system or may cause or aggravate certain lung diseases or conditions. Use exposure controls or personal protection methods described in Section 12.

Eyes

Immediately flush eye thoroughly with water. Continue flushing eye for at least 15 minutes, including under lids, to remove all particles. Call physician immediately.

Skin

Wash skin with cool water and pH-neutral soap or a mild detergent. Seek medical treatment if irritation or inflammation develops or persists. Seek immediate medical treatment in the event of burns.

Inhalation

Remove person to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration. Seek medical help if coughing and other symptoms do not subside. Inhalation of large amounts of Sand Mix require immediate medical attention.

Ingestion

Do not induce vomiting. If conscious, have the victim drink plenty of water and call a physician immediately.

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COMPOSITION INFORMATION

Description: This product consists of a heterogeneous mixture of hydraulic cement and sand. The major compounds are:

3CaO•SiO ₂	Tricalcium Silicate	CAS# 12168-85-3
2CaO•SiO ₂	Dicalcium Silicate	CAS# 10034-77-2
3CaO•Al ₂ O ₃	Tricalcium Aluminate	CAS# 12042-78-3
4CaO•Al ₂ O ₃ •Fe ₂ O ₃	Tetracalcium aluminoferrite	CAS# 12068-35-8
CaSO ₄ •2H ₂ O	Calcium Sulfate dehydrate (Gypsum)	CAS# 7778-18-9 (CAS# 13397-24-5)
SiO ₂	Silica Sand	CAS# 14808-60-7

HAZARDOUS INGREDIENTS

COMPONENT	OSHA PEL	ACGIH TLV-TWA	NIOSH REL
Hydraulic Cement	5mg respirable dust/m ³ 15mg total dust/m ³	10mg total dust/m ³	
Calcium sulfate (CAS# 7778-18-9) [Gypsum (CAS# 13397-24-5)]	5mg respirable dust/m ³ 15mg total dust/m ³	10mg total dust/m ³	
Iron oxide (CAS# 1309-37-1)	10mg/m ³	5mg/m ³	
Calcium carbonate (CAS# 1317-65-3)	5mg respirable dust/m ³ 15mg total dust/m ³	10mg total dust/m ³	
Magnesium oxide (CAS# 1309-48-4)	15mg total dust/m ³	10mg total dust/m ³	
Calcium oxide (CAS# 1306-78-8)	5mg/m ³	2mg/m ³	
Crystalline silica (CAS# 14808-60-7)	10mg of respirable dust/m ³ % SiO ₂ + 2	0.5 mg respirable quartz/m ³	0.05mg respirable quartz dust/m ³

TRACE INGREDIENTS:

Due to the use of substances mined from the earth's crust, trace amounts of naturally occurring, potentially harmful constituents may be detected during chemical analysis.

HAZARD IDENTIFICATION

Potential Health Effects

NOTE: Potential health effects may vary depending upon the duration and degree of exposure. To reduce or eliminate health hazards associated with this product, use exposure controls or personal protection methods as described in Section 12.

Eye Contact

(Acute/Chronic) Exposure to airborne dust may cause immediate or delayed irritation or inflammation of the cornea. Eye contact by larger amounts of dry powder or splashes of wet Sand Mix may cause effects ranging from moderate eye irritation to chemical burns and blindness.

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HAZARD IDENTIFICATION continued

Skin Contact

(Acute) Exposure to dry Sand Mix may cause drying of the skin with consequent mild irritation or more significant effects attributable to aggravation of other conditions. Discomfort or pain cannot be relied upon to alert a person to a hazardous skin exposure.

(Chronic) Dry Sand Mix coming in contact with wet skin or exposure to wet Sand Mix may cause more severe skin effects, including thickening, cracking or fissuring of the skin. Prolonged exposure can cause severe skin damage in the form of chemical (caustic) burns.

(Acute/Chronic) Some individuals may exhibit an allergic response upon exposure to Sand Mix. The response may appear in a variety of forms ranging from a mild rash to severe skin ulcers.

Inhalation

(Acute) Exposure to Sand Mix may cause irritation to the moist mucous membranes of the nose, throat and upper respiratory system. Preexisting upper respiratory and lung diseases may be aggravated by inhalation.

(Chronic) Inhalation exposure to free crystalline silica may cause delayed lung injury including silicosis, a disabling and potentially fatal lung disease, and/or cause or aggravate other lung diseases or conditions.

Ingestion

(Acute/Chronic) Internal discomfort or ill effects are possible if large quantities are swallowed.

CARCINOGENIC POTENTIAL

Sand Mix is not recognized as a carcinogen by NTP, OSHA, or IARC. However, it may contain trace amounts of heavy metals recognized as carcinogens by these organizations. In addition, it also contains crystalline silica which IARC classifies as a known human carcinogen (Group I). The NTP, in its ninth Annual Report on Carcinogens, classified "silica, crystalline (respirable)" as a known carcinogen. (See also Sections 4 and 12)

ACCIDENTAL RELEASE MEASURES

Contain material to prevent contamination of soil, surface water, or ground water. Use dry clean-up methods that do not disperse dust into the air or enter into surface water. Material can be used if not contaminated. Place in an appropriate labeled container for disposal or use. Avoid inhalation of dust and contact with skin and eyes. Use exposure control and personal protection methods as described in Section 12.

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PHYSICAL/CHEMICAL DATA

Appearance/Odor:	Gray, odorless	Physical State:	Solid (Powder mixed with sand)
Boiling Point:	>1000°C	Melting Point:	>1000°C
Vapor Pressure:	Not applicable	Vapor Density:	Not applicable
pH (in Water): (STM D 1293-95)	12 to 13	Solubility in Water:	Slightly soluble (0.1% to 1.0%)
Specific Gravity: (H ₂ O = 1.0)	2.5 - 2.8	Evaporation Rate:	None

FIRE AND EXPLOSION

Flash Point:	None	Lower Explosive Limit:	None
Auto Ignition Temperature:	Not combustible	Upper Explosive Limit:	None
Flammable Limits:	Not applicable	Special Fire Fighting Procedures:	None
Extinguishing Media:	Not combustible	Unusual Fire and Explosion Hazards:	None
Hazardous Combustion Products:	None		

STABILITY AND REACTIVITY DATA

Stability: Product is stable. Keep dry until used.

Conditions to Avoid: Unintentional contact with water. Contact with water will result in hydration and produces (caustic) calcium hydroxide.

Incompatibility: Wet Sand Mix is alkaline. As such, it is incompatible with acids, ammonium salts and aluminum metal.

Hazardous Decomposition: Will not occur.

Hazardous Polymerization: Will not occur.

PRECAUTIONS FOR HANDLING AND STORAGE

Handling and Storage Keep dry until used. Handle and store in a manner so that airborne dust does not exceed applicable exposure limits. Use adequate ventilation and dust collection. Use exposure control and personal protection methods as described in Section 12.

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TOXICOLOGICAL INFORMATION

See Section 5 for Hazard Identification. No recognized unusual toxicity to plants and animals.

Conditions aggravated by exposure: Eye disease, Skin disorders, and Chronic respiratory conditions.

EXPOSURE CONTROLS/PERSONAL PROTECTION

Respiratory Protection

Use local exhaust or general dilution ventilation to control dust levels below applicable exposure limits. Minimize dispersal of dust into the air.

If local or general ventilation is not adequate to control dust levels below applicable exposure limits or when dust causes irritation or discomfort, use MSHA/NIOSH approved respirators.

Eye Protection

Wear safety glasses with side shields or goggles to avoid contact with the eyes. In extremely dusty environments and unpredictable environments, wear tight-fitting un-vented or indirectly vented goggles to avoid eye irritation or injury. Contact lenses should not be worn when handling cement-containing products.

Skin Protection

Wear impervious abrasion- and alkali-resistant gloves, boots, long-sleeved shirt, long pants, or other protective clothing to prevent skin contact. Promptly remove clothing dusty with dry Sand Mix or clothing dampened with moisture mixed with Sand Mix, and launder before re-use. If contact occurs, wash areas contacted by material with pH neutral soap and water.

DISPOSAL

DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator.

IF THIS MATERIAL, AS PACKAGED, BECOMES A WASTE, IT DOES NOT MEET THE CRITERIA FOR A HAZARDOUS WASTE AS DEFINED BY THE ENVIRONMENTAL PROTECTION AGENCY UNDER THE AUTHORITY OF THE RESOURCE CONSERVATION AND RECOVER ACT (40CFR 261), DISPOSE OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.

Comply with all applicable local, state and federal regulations for disposal of unusable or contaminated materials. Dispose of packaging/containers according to local, state, and federal regulations.

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TRANSPORTATION DATA

Sand Mix is not hazardous under U.S. DOT or TDG regulations.

OTHER REGULATORY INFORMATION

Status under US OSHA Hazard
Communication Rule 29 CFR
1910.1200

Sand Mix is considered a hazardous chemical under this
regulation and should be included in the
employer's hazard communication program.

Status under
CERCLA/Superfund, 40
CFR 117 and 302

Not listed.

Hazard Category under SARA
(Title III), Sections 311 and 312

Sand Mix qualifies as a hazardous
substance with delayed health effects.

Status under SARA (Title III),
Section 313 Status under TSCA (as
of May 1997)

Not subject to reporting requirements under Section 313.

Status under the Federal
Hazardous Substances Act

Some substances in Sand Mix are on the
TSCA inventory list.

Status under California Proposition 65

Sand Mix is a hazardous substance subject to
statutes promulgated under the subject act.

This product contains crystalline silica, a substance
known to the State of California to cause cancer.
This product also may contain trace amounts of
heavy metals known to the State of California to
cause cancer, birth defects, or other reproductive
harm.

Not listed.

Status under Canadian
Environmental Protection Act

Sand Mix is considered to be a hazardous material
under the Hazardous Products Act as defined by
the Controlled Products Regulations (Class D2A,
E - Corrosive
Material) and subject to the requirements of WHMIS.

Status under Canadian WHMIS

OTHER INFORMATION

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, express or implied, is made with respect to the information contained herein. It is the user's obligation to determine the conditions of safe use of this product.