

SECTION 1: IDENTIFICATION

PRODUCT IDENTIFIER: **THERMAL 40 CEMENT**
OTHER MEANS OF IDENTIFICATION: **None**
RECOMMENDED USE: **Oilwell cement**
RESTRICTIONS ON USE: **None known**
SUPPLIER IDENTIFIER: **Di-Corp**
8750-53 Ave
Edmonton, AB T6E 5G2
780-440-4923
EMERGENCY PHONE NUMBER: **780-468-4064 (24hr)**

SECTION 2: HAZARD IDENTIFICATION

CLASSIFICATION: Skin corrosion/irritation – Category 1
Serious eye damage/eye irritation – Category 1
Skin sensitization – Category 1
Carcinogenicity (inhalation) – Category 1A
STOT (single exposure) (respiratory tract irritation) – Category 3
STOT (repeated exposure) – Category 1

LABEL SYMBOLS:



SIGNAL WORD:

DANGER

CLASSIFICATION INFORMATION:

Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause cancer if inhaled.
May cause respiratory irritation.

PRECAUTIONARY STATEMENTS:

Causes damage to lungs through prolonged or repeated inhalation.
Obtain special instruction before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Wash hands, face and exposed skin thoroughly after handling. Do not eat drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Contaminated work clothing should not be allowed out of the workplace. Wear protective gloves/clothing and eye/face protection.
If exposed or concerned: Get medical attention.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a doctor.
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER/doctor.
Store locked up in a well-ventilated place. Keep container tightly closed.
Dispose of contents/container in accordance with local, provincial and federal requirements.

OTHER HAZARDS:

Inhalation of cement dust can cause serious, potentially irreversible lung/respiratory tract tissue damage due to chemical (caustic) burns. Individuals with lung disease (bronchitis, emphysema, COPD, pulmonary disease, etc.) or sensitivity to hexavalent chromium can be aggravated by exposure.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	CONCENTRATION (% w/w)
Portland cement	65997-15-1	60-100
<i>Limestone*</i>	1317-65-3	0 – 15
<i>Gypsum*</i>	13397-24-5	2 – 10
<i>Calcium oxide*</i>	1305-78-8	0 - 5
<i>Magnesium oxide*</i>	1309-48-4	0 – 4
Crystalline silica, quartz	14808-60-7	25 - 40

**Typical cement components.*

SECTION 4: FIRST AID MEASURES

SKIN CONTACT:	Quickly and gently brush away excess chemical. Remove contaminated clothing and flush skin with running water for 15 minutes. If large area exposed or irritation or burning persists obtain medical attention.
EYE CONTACT:	Flush with gently flowing warm water for minimum 30 minutes, or until irritation ceases; hold eyelids open to ensure thorough flushing. Neutral saline may be used as soon as it is available. Obtain medical attention when flushing is complete and no further irritation is felt, or permanent damage may result.
INGESTION:	Do not induce vomiting. Obtain immediate medical attention. If immediate medical attention is not available; rinse mouth thoroughly with water then give one glass of water followed by one glass of milk if available. If spontaneous vomiting occurs keep head below hips to prevent aspiration of the vomit into the lungs. Never give anything by mouth if patient is unconscious, rapidly losing consciousness or convulsing.
INHALATION:	Move to area free from dust. Obtain immediate medical attention. If victim is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel.
MOST IMPORTANT SYMPTOMS / EFFECTS:	Corrosive to skin, eyes, gastrointestinal tract and respiratory tract. Exposure may produce an allergic reaction. Long-term exposure by inhalation may cause permanent damage. This product contains crystalline silica, which has been classified by IARC as (Group I) carcinogenic to humans when inhaled. Inhalation of silica can also cause a chronic lung disorder, silicosis.
IMMEDIATE MEDICAL ATTENTION / SPECIAL TREATMENT:	If exposed or concerned get medical advice and attention.

SECTION 5: FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:	Use media appropriate for packaging and surrounding materials.
UNSUITABLE EXTINGUISHING MEDIA:	None known.
SPECIFIC FIRE HAZARDS:	None known.
HAZARDOUS COMBUSTION PRODUCTS:	Not available.
SPECIAL PROTECTIVE EQUIPMENT & PRECAUTIONS:	Self-contained breathing apparatus and chemical resistant clothing required for firefighting personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

Use appropriate safety equipment. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Evacuate nonessential personnel.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEAN UP

Vacuum up, if possible, to avoid generating airborne dust. Collect uncontaminated material for repackaging. Collect contaminated material in approved containers for disposal. Flush spill area with copious quantities of water.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING

Wear appropriate protective equipment. Keep bulk and bagged cement dry until use. Avoid creating dust. Avoid breathing dust. Avoid skin and eye contact. Wash thoroughly after handling. Avoid ingestion. Practice reasonable caution and personal cleanliness. If exposed daily, use oil, Vaseline, silicone base crème etc. to protect exposed skin, particularly neck, face and wrists. Launder contaminated clothing before reuse.

CONDITIONS FOR SAFE STORAGE & INCOMPATIBILITIES

Store in cool, dry area away from incompatibles. Keep containers away from contact with water. Dry all equipment before use. Wash all equipment thoroughly with water when handling is completed. Empty packages contain residual hazardous material and should be handled as if full.

SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS:	Portland cement: ACGIH TLV = 10 mg total dust/m ³ Limestone: Not available Gypsum: ACGIH-TLV = 10 mg/m ³ Calcium oxide: ACGIH TLV = 2 mg/m ³ Magnesium oxide: ACGIH-TLV = 10 mg/m ³ Crystalline Silica Quartz: ACGIH TLV = 0.025 mg/m ³
ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust use process enclosure, local exhaust ventilation or other engineering controls to keep worker exposure below limits.
RESPIRATORY PROTECTION:	PERSONAL PROTECTIVE MEASURES Use a properly fitted particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary.
PROTECTIVE GLOVES:	Rubber gauntlets recommended.
EYE PROTECTION:	Wear tight fitting chemical goggles. Do not wear contact lenses.
OTHER PROTECTIVE EQUIPMENT (SPECIFY):	Protective clothing as required to prevent contact. Ensure eye-wash station and emergency shower are available.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Grey powder
ODOUR:	Odourless
ODOUR THRESHOLD:	Not applicable
pH:	12 - 13
MELTING POINT / FREEZING POINT:	>1000°C (based on ingredient information)
BOILING POINT / RANGE:	Not available
FLASH POINT:	Not applicable
EVAPORATION RATE:	Not applicable
FLAMMABILITY:	Not flammable
FLAMMABILITY / EXPLOSIVE LIMITS:	Not applicable
VAPOUR PRESSURE:	Not applicable

VAPOUR DENSITY:	Not applicable
RELATIVE DENSITY:	Not available
SOLUBILITY:	<1.0% soluble in water
PARTITION COEFFICIENT:	Not applicable
AUTO-IGNITION TEMPERATURE:	Not applicable
DECOMPOSITION TEMPERATURE:	Not applicable
VISCOSITY:	Not available

SECTION 10: STABILITY AND REACTIVITY

REACTIVITY:	Wet cement is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement reacts with water to form silicates and calcium hydroxide.
CHEMICAL STABILITY:	Stable.
POSSIBILITY OF HAZARDOUS REACTIONS:	Hazardous polymerization will not occur.
CONDITIONS TO AVOID:	Avoid dust formation, incompatible products or moisture over prolonged periods.
INCOMPATIBLE MATERIALS:	Acids, ammonium salts, aluminum, hydrofluoric acid, water and oxidizers.
HAZARDOUS DECOMPOSITION PRODUCTS:	Silica dissolves in hydrofluoric acid producing corrosive silicon tetrafluoride gas. Reacts with water to form silicates and calcium hydroxide.

SECTION 11: TOXICOLOGICAL INFORMATION

PRODUCT TOXICITY:	No product or component information available.
SKIN CONTACT:	Can cause irritation especially if skin is moist. Prolonged or repeated contact may cause burns. Effects may be delayed several hours. May produce allergic reactions in some individuals. Repeated contact may cause dermatitis with redness, itching, rash, scaling and cracking.
EYE CONTACT:	Dust may cause immediate or delayed irritation or inflammation. Contact with larger amounts of dry powder or splashes of wet cement may cause effects ranging from moderate irritation to chemical burns and blindness.
INGESTION:	May cause burns or irritation of the lining of the mouth, throat and gastrointestinal tract.
INHALATION:	Can cause irritation or burns of the respiratory tract. This product contains crystalline silica. Prolonged exposure to respirable free silica may cause silicosis, a progressive, disabling and, sometimes, fatal lung disease. Chronic inhalation exposure to crystalline silica quartz has been observed to cause lymph node effects, kidney effects and auto-immune disease. Risk depends on duration and level of exposure.
CARCINOGENICITY:	This product is not listed as a carcinogen by NTP, OSHA or IARC. Contains crystalline silica, which when inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans: IARC has concluded that this chemical is carcinogenic to humans (Group 1): ACGIH has designated this chemical as a suspected human carcinogen (A2): NTP has listed this chemical as a known human carcinogen. Risk depends on duration and level of exposure.
TERATOGENICITY:	No information available.
REPRODUCTIVE TOXICITY:	No information available.
MUTAGENICITY:	Crystalline silica has been shown to cause mutagenic effects in human cells in-vitro.

CHRONIC TOXICITY:	Breathing silica dust may not cause noticeable injury or illness even though permanent lung damage may be occurring. Long-term inhalation of crystalline silica may cause silicosis; a progressive, disabling and sometimes fatal lung disease. Symptoms include cough, shortness of breath, wheezing, non-specific chest illness and reduced pulmonary function. Chronic inhalation exposure to crystalline silica quartz has been observed to cause lymph node effects, kidney effects and auto-immune disease.
TARGET ORGAN EFFECTS:	See Chronic Toxicity.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY:	Because of the high pH of this product, it would be expected to produce significant ecotoxicity upon exposure to aquatic organisms and aquatic systems in high concentrations.
PERSISTENCE AND DEGRADABILITY:	Not applicable to inorganic materials.
BIOACCUMULATIVE POTENTIAL:	Not expected to bioaccumulate.
MOBILITY IN SOIL:	No data available.
OTHER ADVERSE EFFECTS:	This material is alkaline and if released into water, or moist soil, will cause an increase in pH.

SECTION 13: DISPOSAL CONSIDERATIONS

Dispose of in accordance with federal, provincial and local regulations. It is the responsibility of the end-user to determine if material meets the criteria of hazardous waste at the time of disposal. Empty containers, which have not been cleaned and purged, contain residual hazardous material and must be recycled, or disposed of, in accordance with local regulations.

SECTION 14: TRANSPORTATION INFORMATION

TDG	Not regulated
DOT	Not regulated
IATA	Not regulated
UN NUMBER:	Not applicable
PROPER SHIPPING NAME:	Not applicable
CLASS:	Not applicable
PACKING GROUP:	Not applicable
IMDG HAZARDS:	Not regulated
BULK TRANSPORT:	Not regulated
SPECIAL PRECAUTIONS:	None

SECTION 15: REGULATORY INFORMATION

DSL:	Listed
WHMIS CLASS:	D2A, E
TSCA:	Listed

SECTION 16: OTHER INFORMATION

REVISION DATE:	January 24, 2018
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