MATERIAL SAFETY DATA SHEET

Con-Spec Industries Ltd.

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I. PRODUCT IDENTIFICATION

PRODUCT NAME: **Fillcrete**

PRODUCT USE: Economical cement based grout for patching

WHMIS CLASSIFICATION: D.2(B);E

TDG SHIPPING NAME: Not Regulated
TDG CLASSIFICATION: N/A
PIN #: N/A
PACKING GROUP: N/A

EMERGENCY RESPONSE TELEPHONE NUMBER: CANUTEC (613) 996-6666

II. HAZARDOUS INGREDIENTS

PRODUCT	CAS #	WT.%	TLV-TWA	LD_{50}
Portland cement	65997-15-1	10-30	5 mg/m^3 (respirable dust)	N/A
Rapid Setting Cement	960375-09-1	15-40	5 mg/m^3 (respirable dust)	N/A
Silica, quartz	14808-60-7	40-70	0.05 mg/m^3 (respirable dust)	N/D

OSHA PL (Permissible Exposure Limit) - Exposure to airborn crystalline silica shall not exceed and 8 hour time weighted limit as stated by MSHA Standards, Subpart D, Section 56.5001 on air quality specifically “Silica” Crystalline Quartz (respirable) PEL - TWA = 0.1 mg/m^3 and 29 CFR 1910.1000 Table Z-1-A, Air Contaminants, specifically; Crystalline Quartz (respirable) 10 $mg/m^3/ \%SiO_2+2$.
ACGIH TLV (Threshold Limit Value) - Crystalline Quartz TLV-TWA = 0.05 mg/m^3 (Respirable Dust)

III. PHYSICAL DATA

ODOUR AND APPEARANCE: Odourless light grey powder
PHYSICAL STATE: Solid
EVAPORATION RATE: N/A
SPECIFIC GRAVITY: 3.0 - 4.0
pH: Near neutral when dry
When mixed with water pH ~12-13
VAPOUR PRESSURE: N/A
VAPOUR DENSITY: N/A
BOILING POINT: N/A
FREEZING POINT: N/A

N/D = No Data N/A = Not Available or Not Applicable

IV. FIRE OR EXPLOSION HAZARD

FLAMMABILITY: Non-flammable
MEANS OF EXTINCTION: Water Fog ____, Foam ____, CO_2 ____, Dry Chemical ____, Other ____.
FLASH POINT AND METHOD: None
FLAMMABLE LIMIT: N/A
UPPER: N/A
LOWER: N/A

V. REACTIVITY DATA

CHEMICAL STABILITY: Stable
INCOMPATIBILITY WITH OTHER SUBSTANCES: Wet cement is alkaline and is incompatible with acids, ammonium salts and aluminum metal. Cement dissolves in hydrofluoric acid, producing corrosive silicon tetrafloride gas. Cement reacts with water to form silicates and calcium hydroxide. Silicates react with powerful oxidizers such as fluorine, boron trifluoride, chlorine trifluoride, manganese trifluoride and oxygen difluoride.
Acid __X__, Base ____, Oxidizers __X__, Water ____, Other ____.
HAZARDOUS DECOMPOSITION OR POLYMERIZATION PRODUCTS: None

VI. TOXICOLOGICAL PROPERTIES

EFFECTS OF OVEREXPOSURE:
INGESTION: Ingestion of silica quartz has no effect. Ingestion of small quantities of cement is not known to be harmful, large quantities can cause chemical burns in the mouth, throat, stomach and digestive tract.
INHALATION: Cement dust can cause inflammation of the interior lining tissue of the nose and cause irritation of upper respiratory system. Prolonged or repeated exposure may cause lung injury including silicosis.
SKIN CONTACT AND ABSORPTION: Exposure of sufficient duration to wet cement, or to dry cement on moist areas of the body, can cause serious, potentially irreversible damage to skin, eye, respiratory and digestive tracts due to chemical (caustic) burns, including third degree burns. A skin exposure may be hazardous even if there is no pain or discomfort. Cement is capable of causing dermatitis by irritation and allergy.
EYE CONTACT: Airborne dust may cause immediate or delayed irritation or inflammation. Eye contact with large amounts of dry powder or with wet cement can cause moderate eye irritation, chemical burns and blindness. Eye exposures require immediate first aid and medical attention to prevent significant damage.
OTHER CHRONIC EFFECTS OF OVEREXPOSURE: Excessive inhalation of dust may result in respiratory disease, including silicosis, pneumoconiosis and pulmonary fibrosis. The international Agency for Research on Cancer (IARC) has evaluated in Volume 42, Monographs on the Evaluation of the Carcinogenicity Risk of Chemicals to Humans, Silica and some Silicates (1987), that there is “sufficient evidence” for the carcinogenicity of crystalline silica to experimental animals” and “limited evidence” with respect to humans.

CARCINOGENICITY: Yes, Silica Quartz
TERATOGENICITY: N/D
MUTAGENICITY: N/D
REPRODUCTIVE TOXICITY: N/D

VII. FIRST AID MEASURES

EMERGENCY FIRST AID MEASURES:

EYE CONTACT: Rinse eyes thoroughly with water for at least 15 minutes, including under lids, to remove all particles. Seek medical for abrasions and burns.

SKIN CONTACT: Wash exposed areas of the body with soap and water. Seek medical attention for rash, burns, irritation, dermatitis, and prolong unprotected exposures to wet cement, cement mixtures or liquids from wet cement.

INGESTION: Do not induce vomiting. Drink plenty of water, and consult a doctor immediately.

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

VIII. PREVENTIVE MEASURES

RESPIRATORY: Under ordinary conditions 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: Use tight fitting safety goggles is recommended. Wearing contact lenses when using cement, 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 protective equipment that becomes saturated with wet cement and immediately wash exposed areas.

VENTILATION: Use local exhaust or general dilution ventilation or other suppression methods to maintain dust levels below exposure limits.

LEAK AND SPILL PROCEDURES: Place spilled material into a container. Use dry clean up methods that do not disperse the dust into the air. Avoid breathing the dust. Scrape wet cement and place in container. Allow material to dry or solidify before disposal.

WASTE DISPOSAL: Material can be returned to container for later use, or it can be disposed of as common waste.

HANDLING PROCEDURES AND EQUIPMENT: Keep container closed until ready for use. Provide adequate ventilation. Avoid breathing the dust.

STORAGE REQUIREMENTS: Store in a dry place. Minimize dust exposure.

IX. PREPARATION INFORMATION

PREPARED BY: Technical Service Department **DATE:** December 7, 2011

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