

SAFETY DATA SHEET

Product: **PRO FLOWCEM**
 Revision Date: **2016/01/11**

Section 1. Product and Company Identification

Product Name: **PRO FLOWCEM**
 Recommended Use(s): Pumpable rapid curing hydraulic Binder
 Non-Recommended Use(s): Not specified
 Manufacturer: **Proma Adhesives**, 9801 Boulevard parkway,
 Anjou, QC, H1J 1P3, Canada
 Email: info@proma.ca
 Url: www.proma.ca
 Emergency Contact: **Emergency Spills (CANUTEC)**: (613)996-6666 /Emergency contact number in Canada/U.S.A

Section 2. Hazard Identification

GHS Classification for mixture:

Specific target organ toxicity - repeated exposure - Category 2
 Specific target organ toxicity - single exposure - Category 3 (Respiratory)
 Carcinogenicity - Category 1A
 Serious eye damage/eye irritation - Category 1
 Skin corrosion/irritation - Category 1
 Skin sensitization - Category 1

Pictograms:



Signal Words:

Danger

Hazard Statements:

Causes severe skin burns and eye damage.
 Causes serious eye damage.
 May cause respiratory irritation.
 May cause cancer. Route of exposure: respiration.
 May cause damage to organs through prolonged or repeated exposure. Route of exposure: Respiration
 Affected organ: Lungs

Precautionary Statements: General

Prevention

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Wash hands thoroughly after handling. Wear protective gloves, eye protection and a dust mask.

Response

If exposed or concerned: Get medical advice/attention. Get medical advice if you feel unwell. IF IN EYES: Remove contact lenses, if present and easy to do, rinse with water for several minutes. IF ON SKIN: Rinse with water for several minutes. IF INHALED, Move the person to fresh air. IF INGESTED, call a poison center.

Storage

Store locked up.

Disposal

Dispose of contents/container in accordance with local regulations.

Section 3. Composition / Information on Ingredients

Identifiers	Ingredients	Percentage
14808-60-7	Crystalline silica	<3%
65997-15-1	Portland Cement	<30%
65997-16-2	Calcium Aluminate Cement	<60%
1317-65-3	Limestone	<5%



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Section 4. First-Aid Measures

First-Aid: Eyes

IF IN EYES: Wash eyes with plenty of water. Hold eyelids open to ensure adequate flushing. Remove contact lenses if present and easy to do so. Continue rinsing. Seek medical attention if irritation or redness develops.

First-Aid: Skin

IF ON SKIN: Rinse with water for several minutes. Take off all contaminated clothing and wash it before reuse. If redness or other symptoms occurs, seek medical advice/attention.

First-Aid: Ingestion

IF INGESTED: Call a poison center. Do not induce vomiting.

First-Aid: Inhalation

IF INHALED: Move the person to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if symptoms occur.

Section 5. Fire-Fighting Measures

Flammability

The product is not flammable by WHMIS/OSHA criteria.

Suitable Extinguishing Media

Use dry chemical, water spray, carbon dioxide or alcohol-resistant foam.

Unsuitable Extinguishing Media

Not available

Specific Hazards Arising from Combustion of Products

Combustion Products: May include and are not limited to Oxides of carbon (COx).

Heat & Fire: The product is not flammable or combustible. Fire and heat may decompose the product and generate hazardous gas, vapor or dust.

Protective Measures for Fire-Fighting

Wear protective clothing to prevent contact with skin and eyes completely. Wear self-contained breathing apparatus for firefighting. Avoid direct contact with the substance. Avoid breathing gas, vapor or dust. In the case of large fires, evacuate residents who are downwind of fire.

Specific Hazards Arising from Combustion of Products

Explosion data:

Sensitivity to mechanical impact:	Not available
Sensitivity to Static discharge:	Not available

**SAFETY DATA SHEET****Section 6. Accidental Release Measures****Personal Precautions, Protective Equipment and Emergency Procedures**

Wear protective gloves, clothing and protective goggles to prevent contact with skin and eyes.
Avoid direct contact.
Avoid generating dust.
See protective measures in section 7 & 8.

Environmental Precautions

Prevent entry into sewers, water courses, basements or confined areas. Dispose the material in accordance with the government regulation. If the product has entered a water course or sewer or contaminated soil or vegetation, advise the local emergency services and environmental authorities.

Clean-up Procedures

Collect and transfer to a closable container without splash or generating dust / mist. Dispose the material in accordance with the government regulations.

Section 7. Handling and Storage**Precautions for Safe Handling**

Handling: Avoid direct contact with the substance. Avoid breathing dust. Keep container tightly closed. Wear protective gloves, clothing and protective goggles to prevent contact with skin and eyes. Ensure there is sufficient ventilation of the area. Do not eat or drink during handling. Report immediately if physical damage, leakage or spillage occurs.

General hygiene advice: Launder contaminated clothing before reuse. Wash any exposed area of body thoroughly after handling before eating, drinking or smoking.

Conditions for Safe Storage

Store locked up. Keep container tightly closed. Store in a well-ventilated area. Keep out of the reach of children. Respect the laws of the safety standards and occupational health.

Section 8. Exposure Controls / Personal Protection**Control Parameters / Exposure Guideline**

Ingredients	Occupational Exposure Limits	
	OSHA-PEL	ACGIH-TLV
Crystalline silica	(10 mg/m ³)/(%SiO ₂ +2) (resp)	0,05 mg/m ³ (resp)
	(30 mg/m ³)/(%SiO ₂ +2) (total)	
Portland Cement	5 mg/m ³ (resp), 15 mg/m ³ (total)	1 mg/m ³
Calcium Aluminate Cement	5 mg/m ³ (resp), 15 mg/m ³ (total)	5 mg/m ³ (resp), 10 mg/m ³ (total)
Limestone	5 mg/m ³ (resp), 15 mg/m ³ (total)	10 mg/m ³ (total)

Control Parameters / Exposure Controls

Engineering Controls: Use ventilation adequate to keep exposures below recommended exposure limits. (airborne levels of dust, fume, vapor etc.)

Control Parameters / Individual Protective Measures

Eye/Face Protection: Wear Safety goggles. Don't use eye lens.

Skin and Body Protection: Wear protective clothing. Wear a dust mask.

Hand Protection: Wear impermeable gloves.

Respiratory Protection: If ventilation is inadequate or in the case of mechanical work on cured material or when mixing use an adequate respiratory equipment.

**SAFETY DATA SHEET****Section 9. Physical and Chemical Properties****Basic physical and chemical properties Information**

Physical state:	Powder
Color:	Grey
Odour:	Odorless
Odour threshold:	Not available
pH (in water):	11 to 12
Melting/freezing point:	Not available
Boiling point:	Not available
Flash point:	Non flammable
Evaporation rate:	Not available
Flammability:	Non flammable
Upper Explosive Limit:	Not available
Lower Explosive Limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Specific gravity (kg/L):	1,2
Solubility uncured:	Slightly soluble
Solubility cured:	Not available
Octanol/Water coefficient:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity (kcPs @ 21°C):	Not available
Oxidizing Properties:	Not available
Explosive Properties:	Not available
VOC content (g/l)	0

Section 10. Chemical Stability & Reactivity Information

Stability/Reactivity	Stable under ambient condition.
Possibility of Hazardous Reactions	None
Conditions to Avoid	Incompatible materials.
Materials to Avoid	Strong organic acids.
Hazardous Products of Decomposition	May include and are not limited to Oxides of carbon.

Section 11. Toxicological Information**Toxicological Information for Product**

Prolonged / Repeated Exposure: Prolonged / Repeated exposure cause damage to lungs and kidneys.
Ingestion: The product is not classified for ingestion hazard.
Toxicological Data: No toxicological data exists for the product.
Carcinogenicity: This product is classified as carcinogen 1A because of the existence of crystalline silice above the thresholds of occupational health.
Inhalation: May cause respiratory irritation.

Toxicological Information for Component

	Limestone	Quartz (SiO₂)
Toxicity - Oral	LD50 Rat 6450 mg/kg	LD50 Rat 22,5 g/kg
Toxicity - Dermal	LD50 Rabbit > 2000 mg/kg	LD50 Rabbit > 2000 mg/kg
Toxicity - Inhalation	LC50 (4h) Rat > 5 mg/L	LC50 (4h) Rat > 20 mg/L

**SAFETY DATA SHEET****Section 12. Ecological Information**

Ecotoxicity:	No ecotoxicity values for this product. Avoid release into the environment.
Persistence and Degradability:	Not available
Bioaccumulative Potential:	Not available
Mobility in Soil:	Not available
Other Adverse Effects:	Not available

Section 13. Disposal Considerations**Waste Disposal Regulation(s) / Operation**

Avoid release to the environment. Users need to pay attention to the possible existence of regional or national regulations regarding disposal.

Section 14. Transportation Information [ADR-UN, DOT, ICAO, IMDG, TDGR]

UN Number:	NOT CLASSIFIED AS DANGEROUS GOODS
UN Proper Shipping Name:	
Hazard Class:	
Packing group:	

Section 15. Regulatory Information**Safety, Health and Environmental Regulations for Product**

No regulation data for product.

Safety, Health and Environmental Regulations for Component**Limestone**

Canada: WHMIS Classification: Class D Division 2 Subdivision A - Very toxic material causing other toxic effects. DSL / NDSL: Listed on non-domestic substance list (NDSL).

States: Hazardous Substance Right to know list (RTK): Massachusetts. New Jersey. Pennsylvania.
Toxic Substances Control Act (TSCA): listed on TSCA inventory

Quartz (SiO₂)

Canada: WHMIS Classification: Class D Division 2 Subdivision A - Very toxic material causing other toxic effects. DSL / NDSL: Listed on the Canadian DSL (Domestic Substance List) inventory.
Listed on the Canadian Ingredient Disclosure List.

States: Hazardous Substance Right to know list (RTK): Massachusetts. New Jersey. Pennsylvania.
California-Proposition 65 Carcinogens List: Crystalline silica is known to the State of California to cause cancer.

Section 16. Other Information

Date of preparation :	January 11 2016
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Prepared by :	PROMA ADHESIVES INC

Other Information Disclaimer:

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. This company shall not be held liable for any damage resulting from handling or from contact with the above product.

Glossary

ACGIH:	American Conference of Governmental Industrial Hygienists.
ADR:	European Road Transport.
CAS:	Chemical Abstracts Service.
DOT:	US Department of Transportation USA.
DSL:	Canadian Domestic Substances List.
EPA:	US Environmental Protection Agency.
ICAO:	International Civil Aviation Organization.
IMDG:	International Maritime Dangerous Goods Code.
LC50:	Lethal concentration that will kill 50 percent of the test animals within a specified time.
LD50:	The dose required to produce the death in 50 percent of the exposed species within a specified time.



Conforms to OSHA HazCom 2012 & CPR Standards

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N/Ap:	Not applicable.
N/Av:	Not available.
N/D:	Not determined.
NDSL:	Canadian Non-Domestic Substances List.
NIOSH:	National Institute for Occupational Safety and Health.
OSHA:	Occupational Safety and Health Administration, US Department of Labor.
REL:	A recommended exposure limit (REL) is an occupational exposure limit that has been recommended by the United States National Institute for Occupational Safety and Health to the Occupational Safety and Health Administration (OSHA) for adoption as a permissible exposure limit.
RTECS:	Registry of Toxic Effects of Chemical Substances.
SARA:	Superfund Amendments and Reauthorization Act.
STEL:	A short-term exposure limit (STEL) is the acceptable average exposure over a short period of time, usually 15 minutes as long as the time-weighted average is not exceeded.
TDGR:	Transportation of Dangerous Goods Regulations.
TLV:	The threshold limit value of a chemical substance is a level to which it is believed a worker can be exposed day after day for a working lifetime without adverse health effects. Strictly speaking, TLV is a reserved term of the American Conference of Governmental Industrial Hygienists (ACGIH). However, it is sometimes loosely used to refer to other similar concepts used in occupational health and toxicology. TLVs, along with biological exposure indices (BEIs), are published annually by the ACGIH.
TSCA:	Toxic Substances Control Act.
TWA:	A time-weighted average is used to calculate a workers daily exposure to a hazardous substance (such as chemicals, dusts, fumes, mists, gases, or vapors) or agent (such as occupational noise), averaged to an 8-hour workday, taking into account the average levels of the substance or agent and the time spent in the area. This is the guideline OSHA uses to determine permissible exposure limits (PELs) and is essential in assessing a worker's exposure and determining what protective measures should be taken.
UN:	United Nations.