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Section 1: Identification

1.1 Product identifier:

Federal White Masonry Cement

Other means of Identification:

- White Masonry Cement
- Type N, Type S
- ASTM C91 Type N and Type S
- CAN/CSA A3002 Type N

1.2 Recommended use:

Identified uses:

Industrial uses in construction of buildings, pavement and manufacture of concrete.

Restrictions on use:

Professional and industrial uses only, people working with this product should be properly trained regarding its hazards and its safe use. Keep out of reach of children.

1.3 Supplier:

Federal White Cement
P.O. Box 1609
Woodstock, Ontario
Canada
N4S 0A8
Tel: 519-485-5410
www.federalwhitecement.com

1.4 Emergency telephone number (24-hour):

519-485-7400

Section 2: Hazard Identification

2.1 Classification:

According to OSHA Hazard Communication Standard (29 CFR 1910.1200) and Canada Hazardous Products Regulations (WHMIS 2015).

Skin Corrosion Cat. 1; H314
Eye Damage Cat. 1; H318
Skin Sensitization Cat. 1; H317
Specific Target Organ Toxicity, Single Exposure Cat. 3; H335
Carcinogenicity Cat. 1A; H350 (inhalation)
Specific Target Organ Toxicity, Repeated Exposure Cat. 1; H372 (inhalation)

2.2 Label elements:

Danger.
Causes severe skin burns and eye damage.
May cause an allergic skin reaction.
May cause respiratory irritation.
May cause cancer by inhalation.
Causes damage to lungs through prolonged or repeated exposure by inhalation.

Prevention
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust.
Wash hands and exposed skin thoroughly after handling.

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2.2 Label elements (continued):

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, boots, protective clothing, and face protection.

Response
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
Take off contaminated clothing and wash it before reuse.
If skin irritation or rash occurs: Get medical attention.
IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor if you feel unwell.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor.

Storage
Store in a secure and locked location, accessible by authorized persons only.

Disposal
Recycle and/or dispose of contents and containers in accordance with local, regional, national and international regulations.

2.3 Other hazards:

Not available

Section 3: Composition / Information on Ingredients

Chemical Name	Common name / other identifiers	CAS No.	% (wt./wt.)
Portland Cement	Cement	65997-15-1	55 - 75
Calcium magnesium tetrahydroxide	Dolomitic hydrated lime	39445-23-3	25 - 45
Portland Cement may contain variable concentrations of the following substances:			
Calcium oxide	Lime, Quicklime	1305-78-8	12 - 27
Silicon dioxide	Crystalline silica, Quartz	14808-60-7	0 – 0.5
Chromate compounds	Chromium, insoluble compounds	Not available	Trace (<0.1)
Substances not classified for any hazards:			
Calcium carbonate	Limestone	1317-65-3	0 - 5
Calcium sulphate	Gypsum	10101-41-4	2 - 6
Magnesium oxide	Not available	1309-48-4	10 - 22
Other composition information: Product composition may vary from batch to batch and concentration of individual components may be present outside of the stated ranges.			

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Section 4: First-Aid Measures

4.1 Description of first-aid measures:

Inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical help if coughing or other symptoms persist. Inhalation of large amounts of Masonry cement requires immediate medical attention. Call a poison center or doctor. If the individual is not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway.

Eye Contact: Rinse eyes cautiously with water for several minutes. Take care not to rinse contaminated water into the unaffected eye or onto the face. Remove contact lenses if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor. Chemical burns must be treated promptly by a physician.

Skin Contact: Take off immediately all contaminated clothing, shoes and leather goods such as watchbands and belts. Rinse skin with water or shower. Seek medical attention for rashes, burns, irritation, dermatitis and prolonged unprotected exposures to wet cement, cement mixtures or liquids from wet cement. Chemical burns must be treated promptly by a physician.

Ingestion: Immediately call a POISON CENTER or doctor for treatment advice. Rinse mouth. Do not induce vomiting unless directed to do so by the poison center or doctor. If vomiting occurs naturally, lay person on their side, in the recovery position.

4.2 Most important symptoms and effects, acute and delayed:

Inhalation: Airborne dusts are severely irritating to the upper respiratory tract. Symptoms of exposure may include coughing, sneezing and shortness of breath. Long-term inhalation exposure to dusts containing respirable size crystalline silica can cause silicosis and lung cancer.

Eye Contact: Severely irritating in contact with eyes. Causes eye damage which may be permanent and may cause blindness. Solid particles react with moisture in the eye to form clumps fo moist compound which may be difficult to remove.

Skin Contact: Masonry cement dust, when combined with water or sweat on the skin, can cause caustic burns, sometimes referred to as cement burns. Cement burns may result in blisters, dead or hardened skin, or black or green skin. In severe cases, these burns may extend to the bone and cause disfiguring scars or disability.
Workers cannot rely on pain or discomfort to alert them to cement burns because cement burns may not cause immediate pain or discomfort. By the time the worker becomes aware of a cement burn, much damage has already been done. Cement burns can get worse even after skin contact with cement has ended. Any person experiencing a cement burn is advised to see a health care professional immediately.

May cause an allergic skin reaction from trace amounts of sensitizing metals in cement. Symptoms of an allergy range from mild rashes to severe skin ulcers.

Ingestion: Severely irritating to the mouth, throat and gastro-intestinal system if swallowed. Symptoms may include severe pain and burning of the mouth, throat, esophagus and gastrointestinal tract with nausea, vomiting and diarrhea. If aspiration into the lungs occurs during vomiting, severe lung damage may result.

4.3 Indication of any immediate medical attention and special treatment needed:

Corrosive material: Emergency medical attention is needed if inhaled, in contact with eyes or if swallowed.
Workers exposed to cementitious materials who experience skin problems, including seemingly minor ones, are advised to get immediate medical attention. In cement-related dermatitis, early diagnosis and treatment can help prevent chronic skin problems.

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Section 5: Fire-fighting Measures

5.1 Extinguishing media:

Use extinguishing media appropriate to the surrounding fire conditions.

Unsuitable extinguishing media: Use caution when using water. Water jet may scatter the dry powder. Do not get water inside closed containers; contact with water will generate heat and form a corrosive liquid.
Use caution when using CO_2; it may scatter the dry powder.

5.2 Special hazards arising from the product:

Product is not flammable or combustible.

5.3 Special protective equipment and precautions for fire-fighters:

As for any fire, fire-fighters protective clothing and positive pressure SCBA may be necessary.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective work gloves, clothing, boots and eye protection.
Stop further release if safe to do so.
Do not touch spilled material.
Do not breathe any dusts.

6.2 Environmental precautions:

Prevent releases into the environment.

6.3 Methods and material for containment and cleaning up:

Avoid dust generation and prevent wind dispersal.
Do not dry sweep cement dust or blow with compressed air.
Vacuum dust with equipment fitted with a HEPA filter and place in a closed, labelled waste container.
Small spills may be picked up with a damp mop.

Section 7: Handling and Storage

7.1 Precautions for safe handling:

People working with this product should be properly trained regarding its hazards and its safe use.
Wash hands and exposed skin thoroughly after handling. Wash with plenty of water and pH neutral soap; do not use waterless hand cleaners such as alcohol-based gels. Clean nail beds and creases between fingers.
Avoid wearing watches and rings at work; wet cement can collect next to the skin and cause burns.
Contaminated work clothing should not be allowed out of the workplace.
Prevent eye contact: Wear protective gloves, protective clothing and eye protection or face protection (See Section 8).
Do not enter a confined space that stores or contains Masonry cement unless appropriate procedures and protections are in place. Masonry cement can build up or adhere to the walls of a confined space and then release or fall suddenly (engulfment).
Do not eat, drink or smoke where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas.
Follow good practices for safe glove removal.
For hardened, set cement: Use wet cutting methods when possible to avoid generation of breathable dusts.

7.2 Conditions for safe storage:

Store in a secure location, accessible by authorized persons only.
Protect from contact with water, moisture and humidity.
Keep out of reach of children.
Store away from food and animal feed.
Keep away from incompatible substances such as strong acids.

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Section 8: Exposure Controls / Personal Protection

8.1 Control parameters:

Ingredient	ACGIH® TLV®	OSHA PEL	Other Exposure Limits
Portland Cement	1 mg/m^3 (respirable)	15 mg/m^3 (total dust) 5 mg/m^3 (respirable)	NIOSH REL: 10 mg/m^3 NIOSH IDLH: 5000 mg/m^3
Calcium oxide	2 mg/m^3	5 mg/m^3	NIOSH REL: 2 mg/m^3 NIOSH IDLH: 25 mg/m^3
Crystalline silica, Quartz	0.025 mg/m^3 (respirable)	quartz (total dust): 30 mg/m^3 / (%SiO2 + 2) quartz (respirable): 10 mg/m^3 / (%SiO2 + 2) Table Z-3	Ontario TWA: 0.1 mg/m^3 Designated Substance NIOSH REL: 0.05 mg/m^3 NIOSH IDLH: 50 mg/m^3
Chromium, insoluble compounds	0.01 mg/m^3	5 µg/m^3	Quebec (Canada TWA): 0.01 mg/m^3
Limestone	Not established	15 mg/m^3 (total dust) 5 mg/m^3 (respirable fraction)	NIOSH REL: 10 mg/m^3 (respirable)
Calcium sulphate	10 mg/m^3 (inhalable)	15 mg/m^3 (total dust); 5 mg/m^3 (respirable)	Quebec (Canada TWA): 5 mg/m^3 (Poussières respirables) 10 mg/m^3 (Poussières totales)
Magnesium oxide	10 mg/m^3	15 mg/m^3	Quebec (Canada TWA): 10 mg/m^3

8.2 Exposure controls:

Engineering controls: Handle in accordance with good industrial hygiene and safety practice. Ensure regular cleaning of equipment, work area and clothing.
If airborne dusts are generated, monitor concentrations in air and provide local exhaust ventilation when any exposure guideline is exceeded.
If engineering controls and work practices are not effective in controlling exposure to this material or if adverse health symptoms are experienced, wear suitable personal protection equipment including approved respiratory protection.

8.3 Individual protection measures:

Eye/Face protection: Wear safety glasses, chemical safety goggles or full face protection.

Skin protection: Wear waterproof, snug-fitting alkali-resistant gloves, boots, knee and elbow pads. Wear protective clothing with long-sleeves and long pants. Protective clothing can be taped inside gloves and boots. Take off contaminated clothing and wash it before re-use. Contaminated work clothing should not be allowed out of the workplace.

Respiratory protection: When dust concentrations in air exceed the occupational exposure guideline, wear an approved air-purifying respirator with an appropriate cartridge. Consult safety supplier for respirator specifications.
A respiratory protection program that meets the regulatory requirement, such as Canadian Standards Association (CSA) Standard Z94.4, must be followed whenever workplace conditions warrant a respirator's use.

Other protection: Have adequate washing facilities and eyewash fountain readily available in the work area for immediate emergency use.

Every attempt should be made to avoid skin and eye contact with cement. Do not get powder inside boots, shoes or gloves. Do not allow wet, saturated clothing to remain against the skin. Promptly remove clothing and shoes that are wet with cement mixtures. Wash clothing and shoes thoroughly before reuse.

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Section 9: Physical and Chemical Properties

9.1 Information on basic physical and chemical properties:

Appearance:	Solid. Granular powder, white to off-white.
Odour:	Odourless
Odour threshold:	Not available
pH:	>11.5
Melting point/freezing point:	Not applicable
Initial boiling point and boiling range:	Not applicable (>1000°C)
Flash point:	Not available
Flammability (solid, gas):	Not flammable
Upper/lower flammability or explosive limits:	Not applicable
Evaporation rate:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	2.3 – 3.1 (water=1)
Solubility (ies):	Slightly soluble in water (0.1 - 1%)
Partition coefficient (n-octanol/water):	Not available
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not available
Viscosity:	Not available

Section 10: Stability and Reactivity

10.1 Reactivity:

Reacts slowly with water forming hydrated compounds, releasing heat and a strongly alkaline solution.

10.2 Chemical stability:

Stable at normal ambient and anticipated storage and handling conditions of temperature and pressure.

10.3 Possibility of hazardous reactions:

Masonry cement concrete is highly alkaline and may react vigorously with strong acids, ammonium salts and aluminum metal.

10.4 Conditions to avoid:

None known.

10.5 Incompatible materials:

Strong acids - Incompatible with strong acids; may react vigorously.
Water - reaction generates heat.
Aluminum – Aluminum powder and other alkali earth elements will react in the presence of water liberating extremely flammable hydrogen gas. Calcium oxide is corrosive to aluminum metal.
Fluoride compounds – cement dissolves in HF producing corrosive silicon tetrafluoride gas.
Reacts with Ammonium salts.

10.6 Hazardous decomposition products:

In contact with water and moisture, generates corrosive calcium hydroxide.

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Section 11: Toxicological Information

11.1 Information on toxicological effects:

Likely routes of exposure

Skin contact; Eye contact. Inhalation of dust.

Acute toxicity

Inhalation: Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard. Dusts are severely irritating to the respiratory tract.

Ingestion: Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard. Severely irritating or corrosive to mouth, throat and gastro-intestinal tract.

Skin: Data not available for the mixture. Component substances are not classified in any category of acute toxicity hazard.

Skin corrosion / irritation

Human experience has shown Masonry cement can cause caustic burns when in prolonged contact with the skin.

Serious eye damage / irritation

Information for Portland Cement and Calcium oxide: Causes serious eye damage and possible blindness. Damage may be permanent if treatment is not immediate.

STOT (Specific Target Organ Toxicity) – Single exposure

Breathing dusts causes respiratory irritation. Inflammation of the respiratory passages, ulceration and perforation of the nasal septum and pneumonia has been attributed to the inhalation of cement dust containing calcium oxide.

STOT (Specific Target Organ Toxicity) – Repeated exposure

Prolonged and repeated breathing of dust may cause injury to the lungs. The extent and severity of lung injury correlates with the length of exposure and dust concentration.
Contains crystalline silica. Long-term exposure to fine airborne crystalline silica dust may cause silicosis a form of pulmonary fibrosis that can cause shortness of breath, cough and reduced lung function.

Aspiration hazard

Corrosive material; if aspiration into the lungs occurs during vomiting, severe lung damage may result.
Does not meet criteria for classification for aspiration hazard class.

Sensitization - respiratory and/or skin

Product may contain trace concentrations of Chromium VI compounds that can cause an allergic skin reaction, allergic contact dermatitis, or ACD. Once sensitized, brief skin contact with very small amounts of Chromium VI may result in inflammation, rash, itching or severe skin ulcers.
ACD is long-lasting and employees can remain sensitized to Chromium VI for many years.
Not known to be a respiratory sensitizer.

Carcinogenicity

Portland cement is not classifiable as a human carcinogen according to ACGIH® categories.
Crystalline silica is considered a hazard by inhalation. IARC has classified crystalline silica as a Group 1 substance, carcinogenic to humans. This classification is based on the findings of laboratory animal studies (inhalation and implantation) and epidemiology studies that were considered sufficient for carcinogenicity.

Reproductive toxicity

Data not available

Germ cell mutagenicity

Data not available

Interactive effects

Data not available

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Section 12: Ecological Information

12.1 Toxicity:

Avoid release to the environment.
Mixing with water forms an alkaline solution. May be harmful to wildlife and aquatic life.

12.2 Persistence and degradability:

Not readily bio-degradable.

12.3 Bioaccumulative potential:

Not applicable

12.4 Mobility in soil:

Data not available

Section 13: Disposal Considerations

13.1 Disposal methods:

Discard in accordance with municipal or provincial regulations where they apply.
Dispose of waste material using a licensed waste disposal contractor.
Prevent material from entering sewers, drains, ditches or waterways.

Section 14: Transport Information

14.1 Canada Transportation of Dangerous Goods (TDG) Regulations:

Cement is not covered by international transport regulations (IMDG, UN Model Regulations).

14.2 Special precautions for user:

Transport within user's premises: Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of accidental spill or release.

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Canada

NSNR status: All ingredients are listed on the DSL or are not required to be listed.

USA

TSCA status: All ingredients are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

California Proposition 65: ⚠ WARNING. This product can expose you to chemicals including crystalline silica, which is known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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Section 16: Other Information

Revision date:

March 15, 2021

Date of previous SDS:

August 2017. Revisions since previous version: New SDS format revised in all sections.

References and sources for data:

CCOHS Cheminfo
IPCS – International Programme on chemical Safety.
NIOSH Pocket Guide
Portland Cement Association

Legend to abbreviations:

ACGIH® – American Conference of Governmental Industrial Hygienists
IDLH – Immediately Dangerous to Life or Health
LD_{50}- Median lethal dose; the dose causing 50 % lethality
NIOSH – National Institute for Occupational Safety and Health
OSHA - Occupational Safety and Health Administration
REL – Recommended Exposure Limit
STEL – Short-term Exposure Limit
TLV® - Threshold Limit Value
TWA – Time Weighted Average

Additional information:

While the information provided in this Safety Data Sheet is believed to provide a useful summary of the hazards of Masonry cement as it is commonly used, the sheet cannot anticipate and provide all of the information that might be needed in every situation. Inexperienced product users should obtain proper training before using this product. In particular, the data furnished in this sheet do not address hazards that may be posed by other materials mixed with Masonry cement to produce Masonry cement products. Users should review other relevant safety data sheets before working with this Masonry cement or working on Masonry cement products, for example, Masonry cement concrete.

Seller makes no warranty, express or implied, concerning the product or merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided by Federal White Cement, except that the product shall confirm to contracted specifications. The information provided herein was believed by Federal White Cement to be accurate at the time of preparation or prepared from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of the product and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product in respect of which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.