MATERIAL SAFETY DATA SHEET

ALSAN RS 223 POWDER

Offerte en français

GHS	PROTECTIVE CLOTHING	TRANSPORT OF DANGEROUS GOODS
		**NOT REGULATED**

SECTION I: IDENTIFICATION

Use: Filler for self-leveling mortar

Manufacturer / Distributors:

Soprema Canada
1675 Haggerty Street
Drummondville (Quebec) J2C 5P7
CANADA
Tel.: 1 819 478-8163

Soprema Canada
44955, Yale Road West
Chilliwack (BC) V2R 4H3
CANADA
Tel.: 1 604 793-7100

Soprema USA
310, Quadral Drive
Wadsworth (Ohio) 44281
UNITED STATES
Tel.: 1 800 356-3521

Soprema USA
12251, Seaway Road
Gulfport (Mississippi) 39507
ÙNITED STATES
Tel.: 1 228 701-1900

In case of emergency:

SOPREMA (8:00am to 5:00pm): 1 800 567-1492 **CANUTEC (Canada) (24h.): 1 613 996-6666** **CHEMTREC (USA) (24h.): 1 800 424-9300**

SECTION II: HAZARD(S) IDENTIFICATION

DANGER

May cause cancer. Causes damage to organs through prolonged or repeated exposure. May cause respiratory irritation. Causes eye irritation.

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not eat, drink or smoke using this product. Do not breathe dust. Use only outdoors or in a well-ventilated area. Wash hands thoroughly after handling. Wear protective gloves, eye protection and a dust mask. Store locked up. Dispose of container in accordance with local, regional and national regulations.

SECTION III: COMPOSITION AND INFORMATION ON DANGEROUS INGREDIENTS

NAME	CAS #	% WEIGHT	EXPOSURE LIMIT (ACGIH)	
			TLV-TWA	TLV-STEL
Silica, Quartz	14808-60-7	60-100	0.025 mg/m^3	Not available
Ferric oxide	1309-37-1	0.1-1	5 mg/m^3	Not available

Effects of Short-Term (Acute) Exposure

INHALATION

Silica, Quartz: In general, high concentrations of dust may cause coughing and mild, temporary irritation following a short-term exposure. No human or relevant animal information was located. Quartz can have potentially serious respiratory effects following long-term inhalation. (1)

Ferric oxide: No information available. (1)

SKIN CONTACT

Silica, Quartz: In general, quartz is not expected to be irritating to the skin. No human or animal information was located. Quartz is not expected to be absorbed through the skin. (1)

Ferric oxide: No information available. (1)

EYE CONTACT

Silica, Quartz: In general, quartz is not expected to be irritating except as a "foreign object". Some tearing, blinking and mild temporary pain may occur as the solid material is rinsed from the eye by tears. No relevant human or animal information was located. (1)

Ferric oxide: No information available. (1)

INGESTION

Silica, Quartz: Quartz is not expected to be harmful if ingested. No human or reliable animal information was located. Ingestion is not a typical route of occupational exposure. (1)

Ferric oxide: No information available. (1)

Effects of Long-Term (Chronic) Exposure

RESPIRATORY EFFECTS

Silica, Quartz: The respiratory effects from long-term exposure to fine, airborne crystalline silica dust are well documented. Occupational exposures have been associated with the development of silicosis, pulmonary tuberculosis and other diseases of the respiratory system. Silicosis is a progressive, chronic, disabling lung disease. The early symptoms of silicosis (cough, mucous production and shortness of breath upon exertion) are not specific to this disease. So, the development of silicosis may not be detected until advanced stages of the disease. Silicosis may continue to develop even after exposure to crystalline silica has stopped. Evidence of silicosis can normally be seen on a chest x- ray. The risk of developing silicosis and the severity of silicosis depend on the airborne concentration of respirable-size crystalline silica dust to which an employee is exposed and the duration of exposure. Particles with diameters less than 1 micron and freshly cleaved particles (for example, those produced by sandblasting) are considered the most hazardous. There are 3 types of silicosis which a worker may develop based on the duration of exposure and the exposure concentration. "Chronic" or "classic" silicosis is the most common and results from exposures for 10 or more years to relatively low concentrations. In cases of mild silicosis, there is typically no significant respiratory impairment, although there is x-ray evidence of lung injury. In severe cases, significant and increasingly severe respiratory impairment develops. There is no effective treatment for the disease. Life expectancy may be reduced, depending on the severity of the case. Death is not usually a direct result of silicosis, but heart failure (cor pulmonale) may occur as the heart has increasing difficulty pumping blood through the scarred lungs. Silicosis may be complicated by the development of bacterial infections, including tuberculosis. "Accelerated" silicosis results from exposure to high concentrations of crystalline silica over a period of 5-10 years. The disease continues to

develop even after exposure stops, and is often associated with autoimmune diseases for example, scleroderma (a disease involving thickening of the skin). "Acute" silicosis (also referred to as "silicotic alveolar proteinosis") is rare, but develops from exposure to very high concentrations. Symptoms may occur within a few weeks to 4-5 years after the first exposure. Death often results within a few years. Acute silicosis has occurred in occupations such as sandblasting or tunneling where exposure controls were minimal. Occupational exposures to respirable crystalline silica have also been associated with chronic obstructive pulmonary disease, including bronchitis and emphysema, independent of silicosis. (1)

Ferric oxide: No information available. (1)

RESPIRATORY SENSITIZATION
Silica, Quartz: Quartz is not known to cause respiratory sensitization. No human or animal information was located. (1)

Ferric oxide: No information available. (1)

SKIN
Silica, Quartz: Foreign-body reactions (granulomas) have been observed after crystalline silica has accidentally gotten lodged under the skin, as the result of a physical injury. Often this effect is delayed for weeks to years. (1)

Ferric oxide: No information available. (1)

SKIN SENSITIZATION
Silica, Quartz: Quartz is not known to cause skin sensitization. No human or animal information was located. (1)

Ferric oxide: No information available. (1)

KIDNEY/URINARY SYSTEM
Silica, Quartz: Several human population studies have found significant associations between the inhalation exposure to airborne crystalline silica and kidney diseases. However, there is not enough evidence to conclude a causal link. (1)

Ferric oxide: No information available. (1)

LIVER
Silica, Quartz: There have been reports of harmful liver effects in workers exposed to crystalline silica caused by deposits of silica particles. However, these effects have not been studied in depth. (1)

Ferric oxide: No information available. (1)

IMMUNE SYSTEM
Silica, Quartz: There have been many published case reports that describe various autoimmune disorders in workers exposed to crystalline silica. These disorders include scleroderma (a disease involving thickening of the skin), lupus, rheumatoid arthritis, autoimmune hemolytic anemia, and connective tissues disorders. There have also been case reports of conditions that may be related to immunological abnormalities, including chronic kidney disease, and problems with the thyroid, nervous system and blood vessels. Some human population studies have reported a significant increase in deaths from autoimmune diseases in workers exposed to airborne crystalline silica. (1)

Ferric oxide: No information available. (1)

CARCINOGENICITY
Silica, Quartz: The International Agency for Research on Cancer (IARC) has concluded that this chemical is carcinogenic to humans (Group 1). The American Conference of Governmental Industrial Hygienists (ACGIH) has designated this chemical as a suspected human carcinogen (A2). The US National Toxicology Program (NTP) has listed this chemical as a known human carcinogen. (1)

Ferric oxide: IARC has concluded that this chemical is not classifiable as to its carcinogenicity to humans (Group 3). ACGIH has designated this chemical as not classifiable as a human carcinogen (A4). NTP has not listed this chemical in its report on carcinogens. (1)

TERATOGENICITY, EMBRYOTOXICITY, FETOTOXICITY
Silica, Quartz: Quartz is not known to cause developmental toxicity. No human or animal information was located. (1)
Ferric oxide: No information available. (1)

REPRODUCTIVE TOXICITY
Silica, Quartz: Quartz is not known to cause reproductive toxicity. No human or animal information was located. (1)

Ferric oxide: No information available. (1)

MUTAGENICITY
Silica, Quartz: The available evidence is not adequate to conclude that quartz is a mutagen. No conclusions can be drawn from the human information located. A positive result was obtained in a non-standard study using live rats. Positive and negative results were obtained in studies using live animals exposed by routes which are not relevant to occupational exposures. Positive and negative results were obtained in cultured mammalian cells, while a negative result was obtained in a study in bacteria. (1)

Ferric oxide: No information available. (1)

TOXICOLOGICALLY SYNERGISTIC MATERIALS
Silica, Quartz: There is disagreement about whether tobacco smoke increases the severity of the effect of crystalline silica on respiratory impairment. Simultaneous exposure to known carcinogens, for example, benzo(a)pyrene, can increase the carcinogenicity of crystalline silica. (1)

Ferric oxide: No information available. (1)

POTENTIAL FOR ACCUMULATION
Silica, Quartz: Quartz dust can accumulate in the lungs. Inhaled particles are deposited at various locations within the respiratory tract, depending on their shape, mass, aerodynamic characteristics and other physical properties. Respirable particles are considered to be those with an aerodynamic diameter of less than 5 microns. These particles can deposit in the alveolar spaces in the lungs, are cleared more slowly and are more likely to cause injury. Particles larger than 5 microns are more likely to be deposited in the tracheobronchial airways where they are cleared more quickly. Most, but not all, crystalline silica is cleared from the lungs after inhalation and deposition. The elimination of quartz particles continues for many years after the last exposure. Silica is slightly absorbed into the body. Absorbed silica is deposited mainly in the liver, spleen and regional lymph nodes. Silicic acid absorbed into the blood stream is excreted through the kidneys. (1)

Ferric oxide: No information available. (1)

SECTION IV: FIRST AID MEASURES

SKIN CONTACT
Wash with plenty of water.

EYE CONTACT
Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice.

INHALATION
Remove person to fresh air and keep comfortable for breathing. Call a poison centre if you feel unwell.

SWALLOWING
Immediately call a poison centre. Rinse mouth.

SECTION V: FIRE-FIGHTING MEASURES

FLAMMABILITY: Not combustible
EXPLOSION DATA: Sensitivity to mechanical impact: no
Sensitivity to static charge: no
FLASH POINT: Not applicable
AUTO-IGNITION TEMPERATURE: Not applicable
FLAMMABILITY LIMITS IN AIR: Not applicable

FIRE AND EXPLOSION HAZARDS
This product is not combustible (does not burn) and does not support combustion. This product's dust is not a dust explosion hazard.

COMBUSTION PRODUCTS
Not applicable.

FIRE FIGHTING INSTRUCTIONS
This product is not combustible (does not burn). However, caution must be exercised if a fire or explosion occurs in an area or building containing quartz. Evacuate area. Approach fire from upwind. Whenever possible, avoid generation of dust into the air. If possible, avoid the use of high pressure water streams so as not to generate dust in the air. Use water to dampen in order to minimize dust production. Dike heavily contaminated fire-control water or wash water for later disposal. Keep heavily contaminated run-off water out of sewers and water sources.

EXTINGUISHING MEDIA
This product is not combustible (does not burn). Use extinguishing media suitable for surrounding fire.

SECTION VI: ACCIDENTAL RELEASE MEASURES

RELEASE OR SPILL
Restrict access to area until completion of clean-up. Ensure clean-up is conducted by trained personnel wearing appropriate respiratory protection. Ventilate area of spill if there is excessive airborne dust. Do not dry-sweep. Whenever possible, wet down with a water spray to minimize the amount of dust or use a vacuum equipped with HEPA filters. Shovel into clean, labelled containers and cover. Flush area with water.

SECTION VII: HANDLING AND STORAGE

HANDLING
This material is a very toxic solid. Before handling, it is very important that engineering controls are operating and that protective equipment requirements and personal hygiene measures are being followed. People working with this chemical should be properly trained regarding its hazards and its safe use. Immediately report leaks, spills or ventilation failures. Avoid generating dusts. Prevent the release of dusts into the workplace air. Use in the smallest possible amounts in a well ventilated area, separate from the storage area. Use the proper tools to open containers. Ripping open a container can cause an uneven tear, thus making spills more likely. Stand upwind of all opening, dispensing and mixing operations. Keep containers closed when not in use. Good housekeeping is important to prevent accumulations of dust. Dry sweeping is not recommended. Pre-wet the material or use a vacuum equipped with high efficiency filter(s).

STORAGE
Keep quantity stored as small as possible. Storage area should be clearly identified, clear of obstruction and accessible only to trained and authorized personnel. Post warning signs. Inspect periodically for damage or leaks. Store in suitable, labelled containers. Keep containers closed when not in use. Protect from damage. Inspect all incoming containers to make sure they are properly labelled and not damaged.

SECTION VIII: EXPOSURE CONTROLS / PERSONAL PROTECTION

HANDS: No specific requirement, but it is good practice to prevent skin contact.

RESPIRATORY: NIOSH recommendations for crystalline silica (as respirable dust) concentrations in air: up to 0.5 mg/m³ (Assigned Protection Factor = 10): any particulate respirator equipped with an N95, R95, or P95 filter (including N95, R95, and P95 filtering facepieces) except quarter-mask respirators. The following filters may also be used: N99, R99, P99, N100, R100, P100. Up to 1.25 mg/m³ (APF = 25): any powered, air-purifying respirator with a high-efficiency particulate filter. Any supplied-air respirator operated in a continuous-flow mode. Up to 2.5 mg/m³ (APF = 50): any air-purifying, full-facepiece respirator with an N100, R100, or P100 filter. Any powered, air-purifying respirator with a tight-fitting facepiece and a high-efficiency particulate filter. Up to 25 mg/m³ (APF = 1000): any supplied-air respirator operated in a pressure-demand or other positive-pressure mode.

EYES: Wear chemical safety goggles in accordance with standards.

OTHERS: Eye bath and safety shower.

CONTROL OF DUST: Local exhaust is needed to control dust level to below recommended limits.

SECTION IX: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE:	Solid
ODOUR AND APPEARANCE:	White or tan sand; granular, crushed or ground
ODOUR THRESHOLD:	N/A
VAPOUR DENSITY (air = 1):	N/A
EVAPORATION RATE (Butyl acetate = 1):	N/A
BOILING POINT (760 mm Hg):	N/A
FREEZING POINT:	2930°F / 1610°C
SPECIFIC GRAVITY (H_2O = 1):	2.65
SOLUBILITY IN WATER (20°C):	Insoluble
VOLATILE ORGANIC COMPOUND (V.O.C.) CONTENT:	N/A
VISCOSITY:	N/A

SECTION X: STABILITY AND REACTIVITY

STABILITY: This material is stable at handling and storage conditions recommended under the section VII.
CONDITIONS OF REACTIVITY: This material can initiate polymerization reactions with other organic materials (e.g. vinyl monomers).
INCOMPATIBILITY: Strong oxidizing agents, magnesium, manganese trifluoride, xenon hexafluoride, sodium, lithium, hydrofluoric acid.
HAZARDOUS DECOMPOSITION PRODUCTS: None.
HAZARDOUS POLYMERISATION: None

SECTION XI: TOXICOLOGICAL INFORMATION

TOXICOLOGICAL DATA
Silica, Quartz: (1)
LD_{50} (oral, rat): 500 mg/kg

Ferric oxide: (1)
LD_{50} (oral, rat): 10 000 mg/kg

Effects of Short-Term (Acute) Exposure

INHALATION
Silica, Quartz: In one study, persistent inflammation of the lungs was seen in rats exposed to 100 mg/m³ quartz particles for 3 days (6 hours/day; average MMAD 3.3-3.5 microns). The inflammation, which persisted for 3 months, was characterized by the presence of granulocytes in fluid washed from the respiratory tract. Indicators of cytotoxicity (increased protein and increased lactate dehydrogenase in fluid washed from the respiratory tract) were also significantly increased and persisted for 3 months. (1)

EYE IRRITATION
Silica, Quartz: No information from standard tests was located. (1)

Effects of Long-Term (Chronic) Exposure

SKIN SENSITIZATION
Ferric oxide: A negative response was obtained in the Maurer optimization test using guinea pigs. Nor further information is available for evaluation. (1)

Silica, Quartz: No information available. (1)

INHALATION

Silica, Quartz: Lung damage, such as inflammation, silicosis (scarring of the lungs) and alveolar proteinosis (a condition where a type of protein builds up in the alveoli) have been observed in several different animal species following exposures to quartz ranging from one week to 27 months. (1)

Ferric oxide: No information available. (1)

CARCINOGENICITY

Silica, Quartz: IARC has determined that there is sufficient evidence that quartz is carcinogenic to experimental animals. Several studies have shown an increased incidence of lung tumours in rats exposed to quartz by inhalation for up to 2 years. No increase in lung tumours was observed in female mice exposed to quartz for up to 570 days. However, the ability of this study to detect carcinogenic effects was limited due to the small numbers of animals used. (1)

Ferric oxide: No information available. (1)

MUTAGENICITY

Silica, Quartz: The available evidence is not adequate to conclude that quartz is a mutagen. A positive result was obtained in a non-standard study using live rats. Positive and negative results have been obtained in studies in live animals, which used routes of exposure that are not relevant to occupational exposures. Positive and negative results have been obtained in cultured mammalian cells and a negative result was obtained in a test in bacteria. (1)

Ferric oxide: No information available. (1)

SECTION XII: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS

Do not allow product to enter storm or sanitary sewers, lakes, rivers, streams, or public waterways. Block off drains and ditches. Provincial and federal regulations may require that environmental and/or other agencies be notified of a spill incident. Spill area must be cleaned and restored to original condition or to the satisfaction of authorities. This product is not known to be ecotoxic.

SECTION XIII: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL

This product is not listed as hazardous waste. Consult local, state, provincial or territory authorities to know disposal methods.

SECTION XIV: TRANSPORT INFORMATION

This product is not regulated by DOT and TDG.

SECTION XV: REGULATORY INFORMATION

DSL: All constituents of this product are included on the Domestic Substances List (DSL – Canada)

TSCA: All constituents of this product are included on the Toxic Substances Control Act Inventory (TSCA – United States).

Proposition 65: Crystalline silica (airborne particles of respirable size) is known to the State of California to cause cancer.

SECTION XVI: OTHER INFORMATION

GLOSSARY

ANSI:	American National Standards Institute
ASTM:	American Society for Testing and Materials
CAS:	Chemical Abstract Services
CSA:	Canadian Standardisation Association
DOT:	Department of Transportation (United States)
EPA:	Environmental Protection Agency (United States)
GHS:	Globally Harmonized System
LD_{50}/LC_{50}:	Less high lethal dose and lethal concentration published
NIOSH:	National Institute for Occupational Safety and Health
OSHA:	Occupational Safety & Health Administration (United States)
RCRA:	Resource Conservation and Recovery Act (United States)
TDG:	Transportation of Dangerous Goods
TLV-TWA:	Threshold Limit Value – Time-Weighted Average

Reference:

(1) CHEMINFO (2014) Canadian Centre of Occupational Health and Safety, Hamilton (Ontario) Canada.

Code of MSDS: **CA U DRU SS FS 182**
For information: 1 800 567-1492

The Material Safety Data Sheets of SOPREMA Canada are available on Internet at the following site: **www.soprema.ca**

Justification of the update:

- GHS format.

This MSDS contains all the information required by ANSI Z-400.1-1998 standard (United States), by regulation 29 CFR Part 1910.1200 of the Hazard Communication Standard of OSHA, and is in accordance with standard DORS/88-66 OF WHMIS Canada.

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.