

SAFETY DATA SHEET

SAUEREISEN

13 Zircon Potting Cement

Date Prepared : 05/16/2016

SDS No : SCC-013

Date Revised : 02/17/2017

Revision No : 1

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 13 Zircon Potting Cement
PRODUCT DESCRIPTION: Zircon Potting Cement
PRODUCT CODE: 13
PRODUCT FORMULATION NAME: 13 Zircon Potting Cement
CHEMICAL FAMILY: Magnesium Phosphate Cement

MANUFACTURER

Sauereisen
 160 Gamma Drive
 Pittsburgh, PA 15238
Emergency Contact: John Kozak
Emergency Phone: (800)424-9300
Alternate Contact: Don Schubert
Customer Service: 412 963-0303
E-Mail: jakozak@sauereisen.com

24 HR. EMERGENCY TELEPHONE NUMBERS

Poison Control Center (Medical): 1-800-222-1222
 CHEMTREC (US Transportation): 1-800-424-9300
 CHEMTREC (Outside US): 1-703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Carcinogenicity, Category 1B
 Target Organ Toxicity (Repeated exposure), Category 2
 Skin Irritation, Category 2
 Eye Irritation, Category 2B
 Reproductive Toxicity, Category 2

GHS LABEL



Exclamation
mark



Health
hazard

SIGNAL WORD: DANGER

HAZARD STATEMENTS

H315: Causes skin irritation.
 H320: Causes eye irritation.
 H333: May be harmful if inhaled.
 H335: May cause respiratory irritation.
 H360: May damage fertility or the unborn child (state specific effect if known)(state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
 H350: May cause cancer .
 H373: May cause damage to lungs or kidneys through prolonged or repeated exposure via inhalation.

PRECAUTIONARY STATEMENTS

Prevention:

P201: Obtain special instructions before use.

P202: Do not handle until all safety precautions have been read and understood.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

P260: Do not breathe dust/fume/gas/mist/vapours/spray.

P264: Wash ... thoroughly after handling.

Response:

P308+P313: IF exposed or concerned: Get medical advice/ attention.

P314: Get medical advice/attention if you feel unwell.

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+P313: If eye irritation persists: Get medical advice/attention.

P302+P352: IF ON SKIN: Wash with plenty of water/...

P332+P313: If skin irritation occurs: Get medical advice/attention.

P322: Specific measures (see ... on this label).

P362: Take off contaminated clothing.

Storage:

P405: Store locked up.

Disposal:

P501: Dispose of contents/container to ...

POTENTIAL HEALTH EFFECTS

EYES: Contact causes eye irritation.

SKIN: Itching or burning will occur with repeated or prolonged contact. May exacerbate existing skin conditions.

INHALATION: Dust or vapor irritating to eyes and respiratory tract.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Silica, Crystalline	< 1	14808-60-7
Phosphoric Acid, Magnesium Salt	< 11 - 18	7757-86-0
zircon (zr(sio4))	< 75	14940-68-2
Magnesium Oxide	< 15	1309-48-4
Boric Acid	< 2	10043-35-3

4. FIRST AID MEASURES

EYES: Check for and remove all contact lenses. Flush eyes immediately with water or physiological saline for at least 15 minutes while lifting upper and lower lids. Do not use eye ointment. Seek medical attention.

SKIN: Wash contact area thoroughly with soap and water. Remove contaminated clothing. Launder before reuse. Seek medical attention if erythema develops.

INGESTION: If swallowed, do not induce vomiting. Give large quantities of water. Seek medical attention immediately. Never give anything by mouth to an unconscious person.

INHALATION: If difficulty breathing, move to fresh air once. Apply artificial respiration if breathing has stopped. Seek medical attention.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

CHRONIC EFFECTS: The adverse health effects-- silicosis, lung cancer, autoimmune and chronic kidney diseases, tuberculosis and non-malignant respiratory diseases-- are chronic effects.

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable

EXTINGUISHING MEDIA: Water, carbon dioxide, dry chemical, and foam.

EXPLOSION HAZARDS: Not sensitive to mechanical impact or static discharge

FIRE FIGHTING PROCEDURES: Normal precautions are satisfactory.

FIRE EXPLOSION: NA = Not Applicable

SENSITIVE TO STATIC DISCHARGE: None

SENSITIVITY TO IMPACT: None

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Use dustless methods and place in a closeable container for disposal, or flush with water. Observe environmental regulations.

GENERAL PROCEDURES: Sweep, scoop or vacuum the discharged material. Respiratory protection should be worn at all times and skin contact should be avoided. Observe environmental regulations.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Avoid contact with eyes, skin, and clothing.

Avoid breathing dust.

For industrial use only!

Harmful if inhaled.

Do not take internally.

May cause irritation.

Wear chemical splash goggles, gloves, and protective clothing.

Use adequate ventilation and employ respiratory protection where dust or fumes may be generated.

Wash thoroughly after handling.

HANDLING: Do not breathe dust. Keep airborne dust concentrations below permissible exposure limit (PEL). Do not rely on sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean and fit tested respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum clothing that has become dusty.

STORAGE: Store in a cool, dry place.

Keep container closed when not in use.

Keep away from food and drinking water.

Always mix well before using.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
EXPOSURE LIMITS				
Chemical Name	Type		ppm	mg/m ³
Silica, Crystalline	OSHA PEL	TWA		5
		STEL	0.05	
	ACGIH TLV	TWA		0.025
		Supplier OEL	TWA	NL
		STEL	NL	NL
zircon (zr(sio4))	OSHA PEL	STEL		15
	ACGIH TLV	TWA		10
Magnesium Oxide	OSHA PEL	TWA		15
	ACGIH TLV	TWA		10 l

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Safety glasses with side shields, chemical resistant goggles, or face shield. Contact lenses should not be worn.

SKIN: Suitable protective gloves (neoprene, butyl rubber, or viton). Clothing should be clean, long-sleeved workclothes. Synthetic apron. Boots. Wash thoroughly before eating, smoking, applying cosmetics, etc. Thoroughly launder work clothes before reuse. Safety shower nearby.

RESPIRATORY: A suitable respirator complying with the most current NIOSH/ANSI/EN requirements should be used. In the U.S. use dust respirators in compliance with OSHA Standard 1910.134, and in the E.U. use dust respirators in compliance with EN149:2001 FFP2 or FFP3 and rated for at least 10X WEL. . For emergency, a self-contained positive pressure, breathing apparatus or full face respirator is recommended. If TLV of any component is exceeded, use appropriate respiratory protection or ventilate in accordance with OSHA regulation 29 CFR Part 1910.

OTHER USE PRECAUTIONS: Provide adequate general and local exhaust ventilation to meet PEL requirements. provide workers with dust respirators for use in emergency or non-routine situations where dust levels may exceed PEL. A NIOSH approved half face-piece respirator can be used up to 10x PEL. For up to 100x PEL, use a full face-piece respirator with replaceable dust filters. Higher exposures need an approved air-supplied regulator.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: NA = Not Applicable

ODOR THRESHOLD: Not Available

APPEARANCE: Granular powder

COLOR: White to tan.

pH: NA = Not Applicable

PERCENT VOLATILE: NA = Not Applicable

FLAMMABLE LIMITS: 0 to 0

VAPOR PRESSURE: NA = Not Applicable

VAPOR DENSITY: NA = Not Applicable

MELTING POINT: NA = Not Applicable

EVAPORATION RATE: NA = Not Applicable

SPECIFIC GRAVITY: 2 to 2.2

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: No

STABILITY: Stable under normal conditions of use and storage.

CONDITIONS TO AVOID: None

HAZARDOUS DECOMPOSITION PRODUCTS: None

INCOMPATIBLE MATERIALS: None

11. TOXICOLOGICAL INFORMATION

ACUTE TOXICITY

ORAL LD₅₀: No data is available on the product itself.

Notes: Components:

Boric Acid: LD50 (rat): 3500 - 4100 mg/kg

NOTES:

Acute Silicosis can occur with exposure to very high concentrations of respirable crystalline silica over a very short time period, sometimes as short as a few months. The symptoms of acute silicosis include progressive shortness of breath, fever, cough and weight loss. Acute silicosis is fatal.

SERIOUS EYE DAMAGE/IRRITATION: Eye, Skin and Inhalation Irritant.

CARCINOGENICITY

IARC: Silica is listed as having sufficient evidence to be a carcinogen in humans and in experimental animals, for the carcinogenicity of quartz and cristobalite. The overall IARC evaluation was that crystalline silica inhaled in the form of quartz or cristobalite from occupational sources is carcinogenic to humans (group 1).

NTP: The National Toxicology Program, in its Ninth Annual report on Carcinogens, classified "silica, crystalline (respirable)" as a known human carcinogen.

OSHA: Crystalline Silica (Quartz) is not regulated by the US Occupational Safety and Health Administration as a carcinogen.

REPRODUCTIVE TOXICITY: This product contains Boric acid which may damage fertility or harm the unborn child

STOT-SINGLE EXPOSURE:

- Nephrotoxicity - Recent studies suggest that exposure to respirable crystalline silica or that the disease silicosis is associated with the increased incidence of kidney disorders.

GENERAL COMMENTS:

ADDITIONAL INFORMATION: Crystalline Silica (Quartz)

·Silicosis - The major concern is silicosis caused by the inhalation of respirable crystalline silica dust. Silicosis can exist in several forms, chronic (or ordinary), accelerated, or acute.

·Scleroderma - There is evidence that exposure to respirable crystalline silica or silicosis is associated with incidence of scleroderma of the lungs.

·Tuberculosis - Individuals with silicosis are at risk to develop tuberculosis, if exposed to persons with tuberculosis.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Crystalline silica (quartz) is not known to be an environmental hazard.

ECOTOXICOLOGICAL INFORMATION: Crystalline silica (quartz) is not known to be ecotoxic. There is no data that suggests that crystalline silica (quartz) is toxic to birds, fish, invertebrates, microorganisms or plants.

AQUATIC TOXICITY (ACUTE): No data is available on the product itself. Below is for Boric Acid component.

48-HOUR EC₅₀: 133 mg/L Daphnia Magna

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: The packaging and material may be disposed of in landfills; however, material should be covered or wetted to minimize generation of airborne dust.

PRODUCT DISPOSAL: Sweep up excess; flush area with large quantities of water. Material may be disposed of in approved landfill according to official regulations.

EMPTY CONTAINER: Disposal must be made according to official regulations.

RCRA/EPA WASTE INFORMATION: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40 CFR 261 et seq.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated

TECHNICAL NAME: NA = Not Applicable

PRIMARY HAZARD CLASS/DIVISION: NA = Not Applicable

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Not Regulated

AIR (ICAO/IATA)

SHIPPING NAME: Not Regulated

VESSEL (IMO/IMDG)

SHIPPING NAME: Not Regulated

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not Regulated

15. REGULATORY INFORMATION**UNITED STATES****DOT LABEL SYMBOL AND HAZARD CLASSIFICATION**

R36/37/38: Irritating to eyes, respiratory system and skin.

R48/20: Harmful : danger of serious damage to health by prolonged exposure through inhalation.

S22: Do not breathe dust.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S7/8: Keep container tightly closed and dry.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)**311/312 HAZARD CATEGORIES:** Chronic. Carcinogen. Irritant.**313 REPORTABLE INGREDIENTS:** There are no listed chemicals above detection limits in this compound.**TITLE III NOTES:** None above detection limits.**CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA REGULATORY:** Crystalline silica (Quartz) is not classified as a hazardous substance under regulations of the Comprehensive Environmental Response Compensation and Liability Acts (CERCLA), 40 CFR 302**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Silica, Crystalline	14808-60-7
Phosphoric Acid, Magnesium Salt	7757-86-0
zircon (zr(sio4))	14940-68-2
Magnesium Oxide	1309-48-4
Boric Acid	10043-35-3

TSCA STATUS: Components are included in the EPA Toxic Substances Control Act (TSCA) Chemical Substances Inventory.**REGULATIONS****STATE REGULATIONS:**

Massachusetts Toxic Use Reduction Act- Silica, Crystalline (respirable size, <10microns) is toxic for purposes of the Massachusetts Toxic Use Reduction Act

Pennsylvania Worker and Community Right to Know Act- Quartz is a hazardous substance under the act, but it is not a special hazardous substance or an environmental hazardous substance.

California Inhalation Reference Exposure Level (REL)- California established a chronic REL of 3 ug for silica crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.

CALIFORNIA PROPOSITION 65: Known to the State of California to cause cancer and reproductive toxicity and subject to warning and discharge requirements under the "Safe Drinking Act of 1986".

It has not been determined and cannot be ascertained that this product would not expose users to the listed chemicals at the very low level prescribed in the regulations. Therefore, it is the user's responsibility to determine if the percent of the hazardous / carcinogenic ingredients listed elsewhere in the SDS comply with State of California regulations.

RCRA STATUS: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act, or its regulations, 40CFR 261 et seq.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic

R36/37/38: Irritating to eyes, respiratory system and skin.

R48/20: Harmful : danger of serious damage to health by prolonged exposure through inhalation.

S22: Do not breathe dust.

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S38: In case of insufficient ventilation, wear suitable respiratory equipment.

S7/8: Keep container tightly closed and dry.

WHMIS CLASS: Class D, Division 2, Subdivision A: Materials cause other toxic effects, very toxic material.

DOMESTIC SUBSTANCE LIST (INVENTORY): Components included on inventory

16. OTHER INFORMATION

PREPARED BY: John A Kozak **Date Revised:** 02/17/2017

REVISION SUMMARY: This SDS replaces the 05/03/2016 SDS. Revised: **Section 9: SPECIFIC GRAVITY.**

HMIS RATING

HEALTH	*	1
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E