

SAFETY DATA SHEET



230 Arctikure, Part C, Powder

Date Issued : 05/04/2015

SDS No : SCC-230C

Date Revised : 06/17/2020

Revision No : 1

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 230 Arctikure, Part C, Powder
PRODUCT DESCRIPTION: Arctikure, Part C, Powder
PRODUCT CODE: 230RC
PRODUCT FORMULATION NAME: 230 Arctikure, Part C, Powder
CHEMICAL FAMILY: Mineral Blend

MANUFACTURER

Sauereisen
 160 Gamma Drive
 Pittsburgh, PA 15238

Emergency Contact: John Kozak**Emergency Phone:** (800)444-8235**Alternate Contact:** Anthony Comport**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 (Canada Transportation):1-703-527-3887

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS**Health:**

Target Organ Toxicity (Repeated exposure), Category 2
 Carcinogenicity, Category 1B
 Eye Irritation, Category 2B
 Skin Irritation, Category 4
 Respiratory Tract Irritation, Category 3

GHS LABEL

Health
hazard



Exclamation
mark

SIGNAL WORD: DANGER**HAZARD STATEMENTS**

H320: Causes eye irritation.
 H315: Causes skin irritation.
 H335: May cause respiratory irritation.
 H350: May cause cancer .
 H373: May cause damage to lungs or kidneys through prolonged or repeated exposure via inhalation.

PRECAUTIONARY STATEMENTS**Prevention:**

P260: Do not breathe dust/fume/gas/mist/vapours/spray.
 P270: Do not eat, drink or smoke when using this product.
 P264: Wash ... thoroughly after handling.
 P280: Wear protective gloves/protective clothing/eye protection/face protection.
 P284: [In case of inadequate ventilation] wear respiratory protection.

P201: Obtain special instructions before use.

Response:

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

P302+P350: IF ON SKIN: Gently wash with plenty of soap and water.

P304+P341: IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

P330: Rinse mouth.

Storage:

P233: Keep container tightly closed.

Disposal:

P501: Dispose of contents/container in accordance with local/national regulations.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Silica, Amorphous	< 25	7631-86-9
Magnesium Oxide	< 15	1309-48-4
Feldspar	< 9	68476-25-5
Silica, Amorphous, Fumed	< 70	112945-52-5
Aluminum Oxide	< 5	1344-28-1

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 with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Rinse mouth with water.

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

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Causes pain, redness and tearing.

SKIN: Contact causes skin irritation.

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: Material is non-flammable.

EXTINGUISHING MEDIA: NA = Not Applicable

EXPLOSION HAZARDS: NA = Not Applicable

FIRE FIGHTING PROCEDURES: Normal precautions are satisfactory.

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: Keep container closed when not in use.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)				
Chemical Name	Type		ppm	mg/m ³
	Silica, Amorphous	OSHA PEL	TWA	20 mpp
STEL				6
Magnesium Oxide	OSHA PEL	TWA		15
	ACGIH TLV	TWA		10 l
Silica, Amorphous, Fumed	OSHA PEL	STEL		0.1
	ACGIH TLV	TWA		0.025
Aluminum Oxide	ACGIH TLV	STEL	10	

ENGINEERING CONTROLS: Normal ventilation for good working conditions should be used.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Rubber framed or cup type goggles.

RESPIRATORY: Any dust respirator for 5 times PEL or less. Any fume respirator or high-efficiency particulate respirator for 10 times PEL or less. If TLV of any component is exceeded use appropriate respiratory protection or ventilate in accordance with OSHA Regulation 29 CFR Part 1910.

WORK HYGIENIC PRACTICES: Wash thoroughly after handling. Safety shower and eyewash station should be within direct access. Keep containers closed.

OTHER USE PRECAUTIONS: ***This product contains encapsulated silica. By OSHA letter of interpretation, the silica is not considered respirable in either the cement paste form or cured cement form. However, if the cured cement is polished, ground or chipped during processing, handling or use, the silica maybe released as an airborne respirable particle. In these instances appropriate personal protection equipment and local ventilation controls must be employed.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR: None

APPEARANCE: Granular Aggregate.

COLOR: Dark gray to black

pH: Not Established

PERCENT VOLATILE: NA = Not Applicable

FLASH POINT AND METHOD: Non-flammable

FLAMMABLE LIMITS: 0 to 0

AUTOIGNITION TEMPERATURE: Not Established

VAPOR PRESSURE: NA = Not Applicable

VAPOR DENSITY: NA = Not Applicable

MELTING POINT: (3050°F)

SOLUBILITY IN WATER: Insoluble

EVAPORATION RATE: NA = Not Applicable

SPECIFIC GRAVITY: 1

(VOC): 124

10. STABILITY AND REACTIVITY

REACTIVITY: Yes

HAZARDOUS POLYMERIZATION: None

STABILITY: Stable under normal conditions of use and storage.

CONDITIONS TO AVOID: None Expected.

HAZARDOUS DECOMPOSITION PRODUCTS: Silica will dissolve in hydrofluoric acid and produce a corrosive gas - Silicon tetrafluoride.

INCOMPATIBLE MATERIALS: Avoid contact with strong bases, hydrofluoric acids, fluorine, and fluorine compounds.

11. TOXICOLOGICAL INFORMATION

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.

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:

The method of exposure to crystalline silica that can lead to the adverse health effects described below is inhalation.

A.Silicosis

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

Chronic or Ordinary Silicosis (Often referred to as Simple Silicosis) is the most common form of silicosis, and can occur after many years of exposure to relatively low levels of airborne respirable crystalline silica dust. It is further defined as either simple or complicated silicosis.

Simple silicosis is characterized by lung lesions (shown as radiographic opacities) less

than 1 centimeter in diameter, primarily in the upper lung zones. Often, simple silicosis is not associated with symptoms, detectable changes in lung function or disability. Simple silicosis may be progressive and may develop into complicated silicosis or progressive massive fibrosis (PMF). Complicated silicosis or PMF is characterized by lung lesions (shown as radiographic opacities) greater than 1 centimeter in diameter. Although there may be no symptoms associated with complicated silicosis or PMF, the symptoms, if present, are shortness of breath, wheezing, cough, and sputum production. Complicated silicosis or PMF may be associated with decreased lung function and may be disabling. Advanced complicated silicosis or PMF may lead to death. Advanced complicated silicosis or PMF can result in heart disease secondary to the lung disease (cor pulmonale). Accelerated Silicosis can occur with exposure to high concentrations of respirable crystalline silica over a relatively short period; the lung lesions can appear within five (5) years of initial exposure. Progression can be rapid. Accelerated silicosis is similar to chronic or ordinary silicosis, except that lung lesions appear earlier and progression is more rapid. 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.

B.Cancer

IARC- The International Agency for Research and Cancer ("IARC") concluded that there was "sufficient evidence in humans for the carcinogenicity of crystalline silica in the forms of quartz or cristobalite from occupational sources", and that there is "sufficient evidence 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

PRODUCT NAME: POLYMER CONCRETE AGGREGATE

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ITEM DESCRIPTION:

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cristobalite from occupational sources is carcinogenic to humans (Group 1)". The IARC evaluation noted that "carcinogenicity was not detected in all industrial circumstances studies. Carcinogenicity may be dependent on inherent characteristics of the crystalline silica or on external factors affecting its biological activity or distribution of its polymorphs." For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 68, "Silica, Some Silicates..." (1997) 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.

C. Automimmune Diseases- Several studies have reported excess cases of several autoimmune disorders,-- scleroderma, systemic lupus erythematosus, rheumatoid arthritis-- among silica-exposed workers. For a review of the subject, the following may be consulted:

"Occupational Exposure to Crystalline Silica and Autoimmune Disease", Environmental Health Perspectives, Volume 107, Supplement 5, pp. 793-802 (1999); "Occupational Scleroderma", Current Opinion in Rheumatology, Volume 11, pp. 490-494 (1999).

D. Tuberculosis- Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to persons with tuberculosis. The following may be consulted for further information: Occupational Lung Disorders, Third Edition, Chapter 12, entitled "Silicosis and Related Diseases", Parkes, W. Raymond (1994); "Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners," Occup Environ Med., Volume 55, pp.496-502 (1998).

E. Kidney Disease- Several studies have reported excess cases of kidney diseases, including end stage renal disease, among silica-exposed workers. For additional information on the subject, the following may be consulted: "Kidney Disease and Silicosis", Nephron, Volume 85, pp. 14-19 (2000).

F. Non-Malignant Respiratory Diseases- The reader is referred to section 3.5 of the NIOSH special hazard review cited below, for information concerning the association between exposure to crystalline silica and chronic bronchitis, emphysema, and small airways disease. There are studies that disclose an association between dusts found in various mining occupations and non-malignant respiratory diseases, particularly among smokers. It is unclear whether the observed associations exists only with underlying silicosis, only

among smokers, or result from exposure to mineral dusts generally (independent of the presence or absence of crystalline silica, or the level of crystalline silica in dust).

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.

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.

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.

RCRA HAZARD CLASS: Not a hazardous waste.

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Not Regulated

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

UN/NA NUMBER: NA

LABEL: None

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Not Regulated

UN NUMBER: NA

HAZARD CLASS: Not Regulated

AIR (ICAO/IATA)

SHIPPING NAME: Not Regulated

UN/NA NUMBER: NA

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

VESSEL (IMO/IMDG)

SHIPPING NAME: Not Regulated

UN/NA NUMBER: NA

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

CANADA TRANSPORT OF DANGEROUS GOODS

SHIPPING NAME: Not Regulated

UN/NA NUMBER: NA

PRIMARY HAZARD CLASS/DIVISION: Not Regulated

15. REGULATORY INFORMATION

UNITED STATES

DOT LABEL SYMBOL AND HAZARD CLASSIFICATION

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

R40: Limited evidence of a carcinogenic effect.

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

R48/23: Toxic : danger of serious damage to health by prolonged exposure through inhalation.

S20/21: When using do not eat, drink or smoke.

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.

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Chronic. Irritant.

313 REPORTABLE INGREDIENTS: There are no listed chemicals above detection limits in this compound.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Aluminum Oxide	< 5	1344-28-1

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, Amorphous	7631-86-9
Magnesium Oxide	1309-48-4
Feldspar	68476-25-5
Aluminum Oxide	1344-28-1

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 or 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.

CANADA

WHMIS HAZARD SYMBOL AND CLASSIFICATION



Toxic

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

R40: Limited evidence of a carcinogenic effect.

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

R48/23: Toxic : danger of serious damage to health by prolonged exposure through inhalation.

S20/21: When using do not eat, drink or smoke.

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.

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:** 06/17/2020

REVISION SUMMARY: This SDS replaces the 05/04/2015 SDS.

HMIS RATING

HEALTH	*	1
FLAMMABILITY		0
PHYSICAL HAZARD		0
PERSONAL PROTECTION		E