1 PRODUCT AND COMPANY IDENTIFICATION

Product Identifier: Wearcoat 805 Aggregate
Synonyms: Crystalline Silica (Quartz), Sand, Silica Sand, Flint, Ground Silica, Silica Flour.
Common Name: Silica, Crystalline
SDS Number: I69
Revision Date: 6/7/2015
Version: 1
Chemical Family: Ground Silica

Supplier Details:
Recubria
Av. 27 de Febrero casi esq. Lincoln
#251B
Santo Domingo DN

Emergency: Infotrac
Contact: USA: 1-800-535-5053 / International :352-323-3500
Phone: 8296614599

2 HAZARDS IDENTIFICATION

Classification of the substance or mixture

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS):

Health, Carcinogenicity, 1 B
Health, Specific target organ toxicity - Repeated exposure, 2

GHS Label elements, including precautionary statements

GHS Signal Word: DANGER

GHS Hazard Pictograms:

GHS Hazard Statements:

H350 - May cause cancer
H373 - May cause damage to organs through prolonged or repeated exposure

GHS Precautionary Statements:

P260 - Do not breathe dust/fume/gas/mist/vapors/spray.
P281 - Use personal protective equipment as required.
P308+313 - IF exposed or concerned: Get medical advice/attention.
P314 - Get Medical advice/attention if you feel unwell.
P501 - Dispose of contents/container in accordancew with local/regional/national/international regulations.

3 COMPOSITION/INFORMATION OF INGREDIENTS

Ingredients:

Cas#	%	Chemical Name
14808-60-7	100%	Silica, crystalline quartz

4 FIRST AID MEASURES

Inhalation: No specific first-aid is necessary since the adverse health effects associated with inhalation of respirable crystalline silica result from chronic exposures. If there is a gross inhalation of crystalline silica, remove the person immediately to fresh air, give artificial respiration as needed, seek medical attention as needed.

Skin Contact: Not a direct hazard.

Eye Contact: Immediately flush eyes with large amounts of water for at least 15 minutes, lifting eyelids occasionally to facilitate irrigation.
Get medical Attention if irritation develops.

Ingestion: Not a direct hazard.

5 FIRE FIGHTING MEASURES

Flash Point: Not Applicable

LEL: Not Applicable

UEL: Not Applicable

Extinguishing Media: Product is not flammable, combustible or explosive. Use extinguishing media appropriate for surrounding fire.
Special Fire Fighting Procedures: Not applicable.
Unusual Fire and Explosion Hazards: None

6 ACCIDENTAL RELEASE MEASURES

Avoid generating dust. If the concentration of respirable silica dust exceeds the OSHA PEL or other applicable limit (if lower than the PEL), wear respirator specified in Section 8 of this Safety Data Sheet.

Environmental precautions: No specific precautions. Discard any product, residue, disposable container or liner in compliance with regulatory requirements.

Methods for cleaning up: Avoid dry sweeping. Do not use compressed air to clean spilled sand or ground silica. Use water spraying/flushing or ventilated or HEPA filtered vacuum cleaning system. Dispose of in closed containers.

7 HANDLING AND STORAGE

Handling Precautions: Avoid generating dust. Do not breathe dust. Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud.
Use adequate exhaust ventilation and dust collection. Maintain and test ventilation and dust collection equipment. Use all available work practices to control dust exposures, such as water sprays. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Keep airborne dust concentrations below permissible exposure limits. Where necessary to reduce exposures below the PEL or other applicable limit (if lower than the PEL), wear a respirator approved for silica containing dust when using, handling, storing or disposing of this product or bag. See Section 8, for further information on respirators.. Do not alter the respirator. Do not wear a tight-fitting respirator with facial hair such as a beard or mustache that prevents a good face to face piece seal between the respirator and face. Maintain, clean, and fit test respirators in accordance with applicable standards. Wash or vacuum clothing that has become dusty.
Participate in training, exposure monitoring, and health surveillance programs to monitor any potential adverse health effects that may be caused by breathing respirable crystalline silica.
The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community "right-to-know" laws and regulations should be strictly followed

Storage Requirements: Use dust collection to trap dust produced during loading and unloading. Keep containers closed and storeto avoid accidental breaking, or bursting.

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls:

Local Exhaust Ventilation:
Use sufficient local exhaust ventilation to reduce the level of respirable crystalline silica to below the OSHA PEL or other applicable limit (if lower than PEL). See ACGIH "Industrial Ventilation, A Manual of Recommended Practice" (latest edition).

Personal Protective Equipment:

Silica, crystalline quartz (14808-60-7) [100%]

Personal protective equipment

Respiratory Protection:
If it is not possible to reduce airborne exposure levels to below the OSHA PEL or other applicable limit with ventilation, use the table below to assist you in selecting respirators that will reduce personal exposures to below the OSHA PEL. This table is part of the NIOSH Respirator Selection Logic, 2004, Chapter III, Table 1, “Particulate Respirators”. The full document can be found at www.cdc.gov/niosh/npptl/topics/respirators; the user of this MSDS is directed to that site for information concerning respirator selection and use. The assigned protection factor (APF) is the minimum anticipated level of protection provided by each type of respirator worn in accordance with an adequate respiratory protection program. For example, an APF of 10 means that the respirator should reduce the airborne concentration of a particulate by a factor of 10, so that if the workplace concentration of a particulate was 150 ug/m3, then a respirator with an APF of 10 should reduce the concentration of particulate to 15 ug/m3.

Assigned protectionfactor 1	Type of Respirator (Use only NIOSH-certified respirators)
10	Any air-purifying elastomeric half-mask respirator equipped with appropriate type of particulate filter. 2 Appropriate filtering facepiece respirator. 2,3 Any air-purifying full facepiece respirator equipped with appropriate type of particulate filter. 2 Any negative pressure (demand) supplied-air respirator equipped with a half-mask.
25	Any powered air-purifying respirator equipped with a hood or helmet and a high efficiency (HEPA) filter. Any continuous flow supplied-air respirator equipped with a hood or helmet.
50	Any air-purifying full facepiece respirator equipped with N-100, R-100, or P-100 filter(s). Any powered air-purifying respirator equipped with a tight-fitting facepiece (half or full facepiece) and a high-efficiency filter. Any negative pressure (demand) supplied-air respirator equipped with a full facepiece. Any continuous flow supplied-air respirator equipped with a tight-fitting facepiece (half or full facepiece). Any negative pressure (demand) self-contained respirator equipped with a full facepiece.
1,000	Any pressure-demand supplied-air respirator equipped with a half-mask.

1. The protection offered by a given respirator is contingent upon (1) the respirator user adhering to complete program
requirements (such as the ones required by OSHA in 29CFR1910.134), (2) the use of NIOSH-certified respirators in their
approved configuration, and (3) individual fit testing to rule out those respirators that cannot achieve a good fit on
individual workers.
2. Appropriate means that the filter medium will provide protection against the particulate in question.
3. An APF of 10 can only be achieved if the respirator is qualitatively or quantitatively fit tested on individual workers.

Hand protection: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal

technique (without touching gloves outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection: Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection: Complete suit protecting against chemicals, The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Silica, crystalline quartz (14808-60-7) [100%]

Components with workplace control parameters

TWA 0.025 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Suspected human carcinogen

TWA 0.025 mg/m3 USA. ACGIH Threshold Limit Values (TLV)
Lung cancer Pulmonary fibrosis Suspected human carcinogen

Component	CAS No.	OSHA PEL		ACGHI TLV		NIOSH REL		
		TWA	STEL	TWA	STEL	TWA	STEL	Unit
Crystalline Silica (quartz)	14808-60-7	10	None	0.025	None	0.05	None	mg / m3

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	white to off white		
Physical State:	Powder/granules	**Odor:**	No appreciasble odor
Spec Grav./Density:	2.65	**Solubility:**	Silica will dissolve in hydrofluoric acid an
Boiling Point:	4046 deg F	**Freezing/Melting Pt.:**	Not Applicable/3110 deg F
pH:	6-8	**VOC:**	None

10 STABILITY AND REACTIVITY

Chemical Stability:	Product is stable under normal conditions.
Conditions to Avoid:	Contact with powerful oxidizing agents such as fluorine, chlorine trifluoride, and oxygen difluoride may cause fires.
Materials to Avoid:	Contact with powerful oxidizing agents, such as fluorine, chlorine trifluoride and oxygen difluoride, may cause fires.
Hazardous Decomposition:	Will not occur.
Hazardous Polymerization:	Will not occur.

11 TOXICOLOGICAL INFORMATION

Silica, crystalline quartz (14808-60-7) [100%]

Information on toxicological effects

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

A. 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.
Chronic or Ordinary Silicosis is the most common form of silicosis, and can occur after many years (15 to 20 or more) of prolonged repeated inhalation of 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 and cough. 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 pumonale).

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

B. CANCER
IARC - The International Agency for Research on Cancer ("IARC") concluded that "crystalline silica in the form of quartz or cristobalite dust is carcinogenic to humans (Group 1)". For further information on the IARC evaluation, see IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, Volume 100C,"A Review of Human Carcinogens: Arsenic, Metals, Fibres and Dusts " (2011).
The American College of Occupational and Environmental Medicine ("ACOEM") notes: "In 1996, [IARC] re-classified silica as a Class I human lung carcinogen, based on sufficient animal and human data. Although the degree of increased risk varies (with relative risks ranging from 1.3 to 6.9), the risk appears to be greatest in workers with silicosis who smoke. The cancer risk to silica-exposed workers without silicosis (especially if they are not smokers) is less clear despite continuing research, some of which has yielded disparate results." ACOEM, "Medical Surveillance of Workers Exposed to Crystalline Silica", June 2005.
The EU Scientific Committee for Occupational Exposure Limits (SCOEL) concluded in June 2002 (SCOEL Sum Doc. 94-final): "The main effect in humans of inhalation of respirable silica dust is silicosis. There is sufficient information to conclude that the relative risk of lung cancer is increased in persons with silicosis (and apparently, not in employees without silicosis exposed to silica dust in quarries and in the ceramic industry). Therefore preventing the onset of silicosis will also reduce the cancer risk."

C. AUTOIMMUNE DISEASES
Several studies have reported excess cases of several autoimmune disorders, -- scleroderma, systemic lupus erythematosus, rheumatoid arthritis -- among silica-exposed workers.).

D. TUBERCULOSIS
Individuals with silicosis are at increased risk to develop pulmonary tuberculosis, if exposed to tuberculosis bacteria. Individuals with chronic silicosis have a three-fold higher risk of contracting tuberculosis than similar individuals without silicosis.

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 exist 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 the dust).

Sources of information:
The ***NIOSH Hazard Review - Occupational Effects of Occupational Exposure to Respirable Crystalline Silica*** published in April 2002 summarizes and discusses the medical and epidemiological literature on the health risks and diseases associated with occupational exposures to respirable crystalline silica. The *NIOSH Hazard Review* should be consulted for additional information, and citations to published studies on health risks and diseases associated with occupational exposure to respirable crystalline silica. The *NIOSH Hazard Review* is available from NIOSH - Publications Dissemination, 4676 Columbia Parkway, Cincinnati, OH 45226, or through the NIOSH web site, www.cdc.gov/niosh/topics/silica, then click on the link "NIOSH Hazard Review: Health Effects of Occupational Exposure to Respirable Crystalline Silica".

12 ECOLOGICAL INFORMATION

Silica, crystalline quartz (14808-60-7) [100%]

Information on ecological effects

Ecotoxicological Information:
Crystalline silica (quartz) is not known to be ecotoxic; i.e., no data suggests that crystalline silica (quartz) is toxic to birds, fish, invertebrates, microorganisms or plants.

13 DISPOSAL CONSIDERATIONS

Waste Disposal Method:
Discard any product, residue, disposable container or liner in full compliance with national regulations.

Container Handling and Disposal:
Dispose of container and unused contents in accordance with national regulations.

14 TRANSPORT INFORMATION

Non-hazardous for air, sea and road freight.

15 REGULATORY INFORMATION

Component (CAS#) [%] - CODES

Silica, crystalline quartz (14808-60-7) [100%] MASS, NRC, OSHAWAC, PA, TSCA, TXAIR

Regulatory CODE Descriptions

MASS = MA Massachusetts Hazardous Substances List
NRC = Nationally Recognized Carcinogens
OSHAWAC = OSHA Workplace Air Contaminants
PA = PA Right-To-Know List of Hazardous Substances
TSCA = Toxic Substances Control Act
TXAIR = TX Air Contaminants with Health Effects Screening Level

16 OTHER INFORMATION

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