

## GHS Safety Data Sheet Specialty Gaskets Inc.

<b>1</b>	<b>PRODUCT AND COMPANY IDENTIFICATION</b>
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<b>Product Identifier:</b>	Ceramic fiber textiles with S.S wire reinforcement (CFTS), Including yarn, rope, tape, sleeve, cloth with S.S wire reinforcement, etc	
<b>Material Name:</b>	Ceramic fiber, Aluminosilicate Refractory Fiber, Refractory Ceramic Fiber (RCF), S.S Wire	
<b>Recommended Use:</b>	High Temperature Insulation	
<b>Revision Date:</b>	July 2018	
<b>Supplier Details:</b>	<b>HEAD OFFICE</b> Specialty Gaskets Inc. 2-295 Superior Bld. Mississauga, ON L5T 2L6	<b>MONTREAL OFFICE</b> Les Joints Specialty Inc. 4050 Boul. Poirier St. Laurent, QC H4R 2A5
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<b>2</b>	<b>HAZARDS IDENTIFICATION</b>
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**Warning**—dust from this product generated by handling may cause skin, eye and respiratory tract irritation. Possible hazards depend on duration and level of exposure

Hazardous Materials information system(HMIS) Ratings:

Health: 1                      Flammability: 0                      Reactivity: 0                      Personal Protection Index: X

**Possible effects on health:** Prolonged and repeated inhalation of aluminosilicate dust may cause chronic effects on respiratory system such as bronchitis, asthma, and emphysema

**Signs and symptoms of excessive exposure:**

- Eye contact: physical irritation
- Skin contact: physical irritation
- Ingestion: temporary irritation to gastrointestinal tract
- Inhalation: pulmonary dysfunction

<b>3</b>	<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>
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Chemical Ingredients		
CAS#	%	Chemical Name
	>70	Aluminosilicate Fiber
	<10	S.S Wire
	<20	Glass Fiber

4	<b>FIRST AID MEASURES</b>
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**Inhalation:** Remove affected individual to a dust free place, seek medical help if irritation persists.

**Skin Contact:** If skin becomes irritated, do not rub or scratch exposed skin. Wash area of contact thoroughly with soap and water. Using a skin cream or lotion after washing may be helpful. Change into clean clothing.

**Eye Contact:** If eyes become irritated, wash immediately with large amounts of lukewarm water for at least 15 minutes. Eyelids should be held away from the eyeball to ensure thorough rinsing. Do not rub eyes. Get medical attention if irritation persists.

**Ingestion:** Relocate affected individual to an environment of clean and fresh air. Drink plenty of water and seek medical attention if symptoms persist.

**Note to Physicians:** Skin and respiratory effects are the result of mechanical irritation. Fiber exposure does not result in allergic manifestations.

5	<b>FIRE FIGHTING MEASURES</b>
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Non-combustible product

**Auto-Ignition Temperature:** None

**NFPA Unusual Hazards:** None

**Unusual Fire and Explosion Hazards:** None

**Extinguishing Media:** Use proper extinguishing media for the surrounding fire.

**Special Fire Fighting Procedures:** Wear full bunker gear including positive pressure, self-contained breathing apparatus.

6	<b>ACCIDENTAL RELEASE MEASURES</b>
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Avoid creating airborne dust. Maintain routine housecleaning procedures. Vacuum only with HEPA filtered equipment; if sweeping is necessary, use a dust suppressant and keep material in closed containers. Do not use compressed air for clean-up. Workers should wear gloves, goggles and approved respirator. Avoid clean-up procedures that could cause water pollution.

7	<b>HANDLING AND STORAGE</b>
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**CLEAN-UP**

Clean up dust carefully. Use wet sweeping or high efficiency vacuum to remove dust. Do not use compressed air. During after-service removal activities, wet exposed material frequently to minimize airborne dust. A surfactant may be added to the water to improve the wetting process. Use only enough water to wet the insulation. Do not allow water to accumulate on floors.

**EMPTY CONTAINERS**

Product packaging may contain residue. Do not reuse.

<b>8</b>	<b>EXPOSURE CONTROLS/PERSONAL PROTECTION</b>
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Components OSHA supplier  
 Alumino-silicate fiber - None established

ACGIH TLV: Aluminosilicate fiber - none established

For Alumino-silicate fiber, refer to OSHA guidance regarding “Particulates not otherwise Regulated” (PNOR).

Control airborne dust levels as follows:  
Components Particle size OSHA  
 PNOR total dust 15mg/m<sup>3</sup>  
 Respirable dust 5mg/m<sup>3</sup>

ACGIH particulates not otherwise classified (PNOC)  
 INHALABLE PARTICULATE: 10mg/m<sup>3</sup>.  
 RESPIRABLE PARTICULATE: 3mg/m<sup>3</sup>

Other Occupational Exposure Levels (OEL) RCF-related occupational exposure limits vary from country to country. Listed here are a few regulatory OEL examples:

Australia	0.5f/cc
Austria	0.5f/cc
Canada	0.5 to 1 f/cc
Denmark	1 f/cc
France	0.6 f/cc
Germany	0.5 f/cc
Netherlands	1 f/cc
United Kingdom	2 f/cc

Example is: RCFC REG 0.5 f/cc.

The objectives and criteria underlying each of these OEL decisions also vary. The evaluation of occupational exposure limits and determining their relative applicability to the workplace is performed on a case-by-case, by a qualified industrial hygienist.

**Engineering Controls:** Use engineering controls such as ventilation and dust collection devices to limit airborne fiber concentrations to the minimum attainable level

**Eye Protection:** In case of overhead work, wear goggles or safety glasses with side shields to prevent eye contact.

**Skin Protection:** Wear gloves, head covering and full body clothing as necessary to prevent skin irritation.

**Respiratory Protection:** When effective engineering and administrative controls are insufficient, the use of appropriate respiratory protection, pursuant to the requirements of OSHA 1910.134 and 29 DFR 1926.103 for the particle hazard or airborne concentrations in the work place, it is recommended.

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
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Ceramic Fiber

<b>Odor:</b> None	<b>pH:</b> N/A
<b>Melting/Freezing Point:</b> 1760°C	<b>Boiling Point:</b> N/A
<b>Vapor Density:</b> N/A	<b>Solubility:</b> N/A

Chemical Indexes

Al <sub>2</sub> O <sub>3</sub>	Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub> +SiO <sub>2</sub> +ZrO <sub>2</sub>	ZrO <sub>2</sub>	Fe <sub>2</sub> O <sub>3</sub>	Na <sub>2</sub> O-K <sub>2</sub> O
46%	97%	-	-	<1.0%	≤0.5%

Glass Fiber Reinforcement

<b>Odor:</b> None	<b>pH:</b> N/A
<b>Melting/Freezing Point:</b> 800°C	<b>Boiling Point:</b> N/A
<b>Vapor Density:</b> N/A	<b>Solubility:</b> N/A
<b>Vapor Pressure:</b> N/A	<b>Specific Gravity:</b> 2.59
<b>Percent Volatile:</b> N/A	<b>Evaporative Rate:</b> N/A
<b>Appearance:</b> White/Off-White/Tan colored solid	

Chemical Indexes

SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	CaO	MgO	R <sub>2</sub> O	Fe <sub>2</sub> O <sub>3</sub>
67% ± 0.5	6.2% ± 0.4	9.5% ± 0.3	4.2% ± 0.3	12% ± 4	<0.4%
C	Si	S	Mn	Ni	Cr
0.08%	1%	0.05%	2%	8%	17%

S.S Wire Reinforcement

<b>Odor:</b> None	<b>pH:</b> N/A
<b>Melting/Freezing Point:</b> 1083°C	<b>Boiling Point:</b> N/A
<b>Vapor Density:</b> N/A	<b>Solubility:</b> N/A
<b>Vapor Pressure:</b> N/A	<b>Density:</b> about 8.9g/cm <sup>3</sup>
<b>Ignition Temperature:</b> N/A	<b>Appearance:</b> Solid Metal Strip

Chemical Indexes

C	Si	S	Mn	Ni	Cr
0.08%	1%	0.05%	2%	8%	17%

**10 STABILITY AND REACTIVITY**

**Chemical Stability:** Stable under conditions of normal use

**Materials to Avoid Identification:** Hydrofluoric acid and concentrated alkali

**11 TOXICOLOGICAL INFORMATION**

Epidemiological studies conducted by institution of human environment protection in China has provided no evidence that there is a direct cause-and effect relationship between cumulative exposure to aluminosilicate fibers and lung cancers or pulmonary diseases. However recent toxicological experiments using physiological exposure method(inhalation)have produced findings of respiratory disease in rodents, Aluminosilicate refractory fiber has found to be a rodent carcinogen under the conditions that the rodents are exposed to high levels of the material(75—115fibers/cc) on a basis of lifetime duration.

**12 ECOLOGICAL INFORMATION**

No data is available on adverse effects of the material on the environment.

**13 DISPOSAL CONSIDERATIONS**

As produced, this material is usually accepted for disposal at most sites licensed for the disposal of industrial waste. Check applicable regulations and waste site policies prior to disposal. Waste should be placed in sealed containers for disposal. In case of contamination, by other materials classified as hazardous waste, expert guidance should be sought.

**14 TRANSPORTATION INFORMATION**

Product should remain in sealed containers during transportation.

**15 REGULATORY INFORMATION**

CERCLA: the aluminosilicate fibers of this product have an average diameter of 2-4 um and are not considered CERCLA hazardous substances (CERCLA 40 CFR302)

Clean Air Act(CAA): thermal insulation fibers are composed of(RCF) with an average diameter greater than 1 micron, and therefore are not considered hazardous air pollutants.

Toxic Substances Control Act(TSCA): all substances in this product are listed, as required, on the TSCA chemical inventory.

**State Regulations**



California: aluminosilicate fiber has not been listed by the State of California on proposition 65, the Safe Drinking Water and Toxic Enforcement Act of 1986.

New Jersey: Chemicals which are listed as special health hazard substances as defined in New Jersey worker and Community Right to know Act, New Jersey Administrative code, title 8, Department of health, Chapter 59, Subchapter 10

Pennsylvania: aluminosilicate fiber is not listed as a special health hazard substance as defined in Pennsylvania Right-to-Know Law, Section 3800.

<u>Chemical Name</u>	<u>CAS Number</u>
None	142844-00-6

### International Regulations

Canadian Workplace Hazardous Materials Information System(WHMIS): No Canadian Workplace Hazardous Materials Information System categories apply to this product.

Canadian Environmental Protection Act(CEPA): All substances in this product are listed, as required, on the Domestic Substances List(DSL).

Chemicals which are listed on the Non-Domestic Substances list:

<u>Chemical Name</u>	<u>CAS Number</u>
None	N/A

Removal after service: Under sustained and steady high temperature over 1800°F, this material will possibly transform to crystalline silica (cristobalite) in exposed portions. Prolonged or repeated exposure to respirable crystalline silica dust may lead to lung diseases. IARC has listed crystalline silica in Category 2A a probable carcinogen (“crystalline silica inhaled in the form of quartz or cristobalite from occupational source is carcinogenic to humans” IARC monograph 68, June 1997 p 210—211). The permissible exposure limit(PEL) set by OSHA for respirable cristobalite is 0.05mg/m3. Whenever possible follow section 8 procedures for exposure controls and personal protection.

<b>16</b>	<b>OTHER INFORMATION</b>
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### Abbreviations

CERCLA: comprehensive environmental response compensation and liability act of 1980

CAS: Chemical abstracts service

f/cc: fibers per cubic centimeter

HMIS: Hazardous Material information system

Mg/m3: Milligrams per cubic meter of air

NIOSH: National institute for Occupational Safety and Health

OSHA: Occupational Safety and Health Administration



PEL: permissible exposure limit

SARA: super amendments and reauthorization act

TSCA: toxic Substances Controls Act

**Disclaimer:**

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