Ceramic with Wire Products

Safety Data Sheet

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SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Form: Article

Product Name: Ceramic with Wire Products

Synonyms: Ceramic Fiber Textile

1.2. Intended Use of the Product

Use of the Substance/Mixture: High temperature insulation and sealing applications

1.3. Name, Address, and Telephone of the Responsible Party

Company

NEWTEX INDUSTRIES, INC.
8050 Victor-Mendon Road
Victor, New York 14564
(585) 924-9135

1.4. Emergency Telephone Number

Emergency Number : 1-800-836-1001

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

GHS-US Classification

OSHA Hazard Communication Standard (HCS) 2012 Category 2 carcinogen classification.

2.2. Label Elements

GHS-US Labeling

2.3. Other Hazards

Suspected cancer hazard by inhalation. May cause mild and temporary irritation to eye, skin and upper respiratory tract upon contract or exposure.

2.4. Unknown Acute Toxicity (GHS-US)

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substance

Not applicable

3.2. Mixture

Name	Product Identifier	%
Aluminosilicate Ceramic Fiber (Al_2SiO_5)	(CAS No) 142844-00-6	85
Fiberglass Filament	(CAS No) 65997-17-3	Varies
Binder Material	N/D	Varies
Reinforcement Wire	N/D	Varies

Within the meaning of the OSHA Hazard Communication Standard [29 CFR 1910.1200]: this mixture is not considered a hazard when used in a manner which is consistent with the labeled directions. This mixture is considered an article in its final form.

SECTION 4: FIRST AID MEASURES

4.1. Description of First-aid Measures

First-aid Measures General: The need for first aid is not anticipated under normal conditions of use.

First-aid Measures After Inhalation: Move the person to a dust free location. Get medical attention if the irritation continues.

First-aid Measures After Skin Contact: For skin irritation, remove soiled clothing. 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.

First-aid Measures After Eye Contact: Flush with large amounts of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Do not rub eyes. Get medical attention if irritation persists.

First-aid Measures After Ingestion: Unlikely to happen. However, if gastrointestinal tract irritation develops, move the person to a dust free environment.

4.2. Most Important Symptoms and Effects Both Acute and Delayed

Symptoms/Injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

Symptoms/Injuries After Inhalation: Mild and temporary irritation to upper respiratory upon contact or exposure.

Symptoms/Injuries After Skin Contact: Mild and temporary irritation to skin upon contact or exposure.

Symptoms/Injuries After Eye Contact: Mild and temporary irritation to eye upon contact or exposure.

Symptoms/Injuries After Ingestion: Not expected to be a primary route of exposure. May cause gastro-intestinal blockage if swallowed.

4.3. Indication of Any Immediate Medical Attention and Special Treatment Needed

If medical advice is needed, have product container or label at hand.

SECTION 5: FIRE-FIGHTING MEASURES

5.1. Extinguishing Media

Suitable Extinguishing Media: Ceramic fiber is not flammable. Use extinguishing media suitable for type of surrounding fire. The product should be cooled with water.

Unsuitable Extinguishing Media: None known.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Product is not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any fire.

Firefighting Instructions: Use firefighting measures appropriate for the surrounding fire.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2).

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Accidental release of the product does not present a hazard under normal conditions of use.

6.1.1. For Non-Emergency Personnel

Protective Equipment: Use of personal protective equipment (PPE) is not generally required but should be evaluated based on the extent and severity of accidental release. Use air purifying respirator if airborne dust presents.

Emergency Procedures: Evacuate the area if accidental release presents a significant hazard.

6.1.2. For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection as conditions warrant.

Emergency Procedures: Upon arrival at the scene a first responder is expected to protect oneself and the public, secure the area, and call for the assistance of trained personnel as conditions permit.

6.2. Environmental Precautions

Do not release the material to sewers or drains.

6.3. Methods and Materials for Containment and Cleaning Up

For Containment: Contain the product and collect as any solid.

Methods for Cleaning Up: Avoid creating airborne dust. Dust suppressing cleaning methods such as wet sweeping or vacuuming should be used to clean the work area. If vacuuming, the vacuum must be equipped with a HEPA filter. Compressed air or dry sweeping should not be used for cleaning.

6.4. Reference to Other Sections

See Section 8 for advice on personal protective equipment and Section 13 for disposal considerations.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Additional Hazards When Processed: Further processing of the product requires an evaluation of potential hazards based upon intended use.

Precautions for Safe Handling: Handle ceramic fiber carefully. Avoid creating airborne dust. Use air purifying respirator if airborne dust presents. If power tools are used for handling ceramic fiber, high airborne dust may be generated, therefore local exhaust and other dust control measures should be implemented.

Hygiene Measures: Frequently clean the work area with HEPA filtered vacuum or wet sweeping to minimize accumulation of debirs. Do not use compressed air for clean-up.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: No technical measures are necessary for storage of the product.

Storage Conditions: Store in original container in dry area. Keep container close when not in use.

Incompatible Products: None known under normal conditions.

7.3. Specific End Use(s)

No use is specified

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), AIHA (WEEL), NIOSH (REL), or OSHA (PEL).

Aluminosilicate Ceramic Fiber (CAS No) 142844-00-6	
OSHA	Not established
ACGIH	TLV 0.2 f/cc, 8-hr. TWA
NIOSH	0.5 f/cc, 8-hr. TWA
Supplier	0.5 f/cc, 8-hr. TWA
Fiberglass Filament (CAS No) 65997	
OSHA	PEL 5 mg/m^3 respirable

8.2. Exposure Controls

Appropriate Engineering Controls : Local exhaust ventilation, dust collection, and other equipment designed to minimize dust.

Personal Protective Equipment : If dusts or debris are generated during processing, wear safety glasses with side shields or other forms of eye protection in compliance with appropriate OSHA standards. Do not touch eyes with soiled body parts or materials. Wear gloves, head coverings and washable or disposable full body clothing as necessary to prevent skin irritation. Clothing may be used. Wash work clothing separately. Minimize or avoid non-work dust.

Respiratory Protection : When exposure is under 0.5 f/cc, respiratory protection equipment is optional. When exposure is above 0.5 f/cc limit, half-facepiece, or full-facepieve air purifying respirator equipped with a NIOSH certified P100 particulate filter cartridge or PAPR with tight-fitting full facepiece is recommended depending on the level of exposure.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : White fibrous material

Odor : Odorless

Odor Threshold : No data available

pH : Not applicable

Evaporation Rate : Not applicable

Melting Point : 3200 °F (1760 °C)

Freezing Point : Not applicable

Boiling Point : Not applicable

Flash Point : No data available

Auto-ignition Temperature : No data available

Decomposition Temperature : No data available

Flammability (solid, gas) : No data available

Vapor Pressure : Not applicable

Relative Vapor Density at 20°C : Not applicable

Relative Density : No data available

Specific Gravity : 2.50 – 2.75

Solubility : Insoluble

Partition Coefficient: N-Octanol/Water : Not applicable

Viscosity : Not applicable

9.2. Other Information No additional information available

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity: Hazardous reactions will not occur under normal conditions.

10.2. Chemical Stability: Stable under recommended handling and storage conditions.

10.3. Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

10.4. Conditions to Avoid: None known.

10.5. Incompatible Materials: Hydrofluoric, phosphoric acids and concentrated alkalis.

10.6. Hazardous Decomposition Products: None known.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological Effects

Acute Toxicity: Not classified

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: A definitive Maximum Tolerated Dose Study (MTD) by nose only, lifetime inhalation in rats and hamsters Appeared to confirm that RCF was an animal carcinogen under certain test conditions, e.g., extremely high concentrations of approximately 200 f/cc inhaled directly into the lungs. In one study, conducted by the Research and Consulting Company, (Geneva, Switzerland), rats and hamsters were exposed to 30 mg/m³ (about 200 fibers/cc) of specially-prepared RCF for 6 hours/day, 5 days/week, for up to 24 months. In rats, a statistically significant increase in lung tumors was observed; two mesotheliomas (cancer of the pleural lining between the chest wall and lung) were also identified. Hamsters did not develop lung tumors; however, interstitial fibrosis and mesothelioma was found. Some, in the scientific community, have concluded that the "maximum tolerated dose" was exceeded and that significant particle contamination was a confounding issue; therefore, these study findings may not represent an accurate assessment of the potential for RCF to produce adverse health effects.

In a subsequent multi-dose animal inhalation study at 25 f/cc, 75 f/cc, and 115 f/cc found no statistically significant increase in lung cancer; a no observed effect level (NOEL) was found at 25 f/cc. This level is 50 times the HTIW Coalition recommended exposure guideline (REG) of 0.5 f/cc for humans.

Although studies, involving occupationally exposed workers, have not identified any increased incidence of respiratory disease, results from animal testing have been used as the basis for hazard classification. In each of the following cases, the conclusions are qualitative only and do not rest upon any quantitative analysis suggesting that the hazard actually may occur at current occupational exposure levels. In October 2001, the International Agency for Research on Cancer (IARC) confirmed that Group 2b (possible human carcinogen) remains the appropriate IARC classification for RCF.

Glass, oxide, chemicals (65997-17-3)	
IARC group	2B
Aluminosilicate Ceramic Fiber (CAS No) 142844-00-6	
IARC Group	**2B**

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Ceramic Fiber/RCF may cause temporary and mild irritation to respiratory tract if it is inhaled in sufficient quantity.

Symptoms/Injuries After Skin Contact: Mild itchiness or irritation.

Symptoms/Injuries After Eye Contact: Mild eye irritation similar to symptoms caused by other debris.

Symptoms/Injuries After Ingestion: Not expected to be a primary route of exposure. May cause gastro-intestinal blockage if swallowed.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity: Not an evironmental hazard.

12.2. Persistence and Degradability: Not degradable.

12.3. Bioaccumulative Potential: Not applicable.

12.4. Mobility in Soil: No mobility in soil.

12.5. Other Adverse Effects: No known other adverse effects to the environment.

Other Information : Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste Treatment Methods

Waste Disposal Recommendations: Dispose in approved landfill. This substance is not specifically listed as hazardous waste in federal regulations. To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended. For particular situation check federal, local, regional, state or provincial regulations to identify all applicable disposal requirements.

SECTION 14: TRANSPORT INFORMATION

The shipping description(s) stated herein were prepared in accordance with certain assumptions at the time the SDS was authored, and can vary based on a number of variables that may or may not have been known at the time the SDS was issued.

14.1. In Accordance with DOT Not regulated for transport

14.2. In Accordance with IMDG Not regulated for transport

14.3. In Accordance with IATA Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1. US Federal Regulations

EPA: Superfund Amendments and Reauthorization Act (SARA) Title III - This product does not contain any substances reportable under Sections 302, 304, 313, (40 CFR 372). Sections 311 and 312 (40 CFR 370) apply (delayed hazard). Toxic Substances Control Act (TSCA) - RCF has been assigned a CAS number; however; it is an "article" under TSCA and therefore exempt from listing on the TSCA inventory. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) and the Clean Air Act (CAA) - This product contains fibers with an average diameter greater than one micron and thus is not considered a hazardous air pollutant.

OSHA: Comply with Hazard Communication Standards 29 CFR 1910.1200 and 29 CFR 1926.59 and the Respiratory Protection Standards 29 CFR 1910.134 and 29 CFR 1926.103.

15.2. US State Regulations

California: Ceramic fibers (airborne particles of respirable size) is listed in Proposition 65, The Safe Drinking Water and Toxic Enforcement Act of 1986 as a chemical known to the State of California to cause cancer.

Other States: RCF products are not known to be regulated by states other than California; however, state and local OSHA and EPA regulations may apply to these products. If in doubt, contact your local regulatory agency.

15.3 Canadian Regulations

Canadian Workplace Hazardous Materials Information System (WHMIS) – Classified as Class D2A – Materials Causing Other Toxic Effects

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

15.4 Europe

Integration of RCF/ASW in to ANNEXE XV of the REACH Regulation:
RCF is classified under the CLP (classification, labelling and packaging of substances and mixtures) regulation as a category 1B carcinogen. On January 13, 2010 the European Chemicals Agency (ECHA) updated the candidate list for authorization (Annex XV of the REACH regulation) and added 14 new substances in this list including aluminosilicate refractory ceramic fibers and zirconia aluminosilicate refractory ceramic fibers.

As a consequence, EU (European Union) or EEA (European Economical Area) suppliers of articles which contain aluminosilicate refractory ceramic fibers and zirconia aluminosilicate refractory ceramic fibers in a concentration above 0.1% (w/w) have to provide sufficient information, available to them, to their customers or upon requests to a consumer within 45 days of the receipt of the request. This information must ensure safe use of the article, and as minimum contains the name of the substance.

15.5 Other Regulations

IARC: The International Agency for Research on Cancer (IARC) confirmed that Group 2b (possible human carcinogen) remains the appropriate IARC classification for RCF including ceramic fiber. Possible cancer hazard by inhalation, especially when the fiber becomes cristobalite at high temperature above 1,800 F.

National Toxicology Program (NTP), classified respirable RCF and glasswool as substances reasonably anticipated to be carcinogens.

The American Conference of Governmental Industrial Hygienists (ACGIH) has classified RCF as "A2-Suspected Human Carcinogen."

SECTION 16: OTHER INFORMATION, INCLUDING DATE OF PREPARATION OR LAST REVISION

Revision Date	:	3/16/18
Other Information	:	This Safety Data Sheet was prepared in accordance with OSHA 1910.1200 Hazard Communication Standard (HCS 2012).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

SDS US (GHS HazCom)