CerraFlex® Molten Metal Filter Material

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Date of issue: 08/06/2014 Supersedes: 10/04/2008 Version: 1.0

SECTION 1: IDENTIFICATION

1.1. Product Identifier

Product Name: CerraFlex® Molten Metal Filter Material

Other means of identification: Foundry filtration

1.2. Intended Use of the Product No additional information available

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

Manufacturer

Niche Fluoropolymer Products

42 Mountain Avenue

Nesquehoning, PA 18240

T 1-800-441-7777

www.nichefpp.com

1.4. Emergency Telephone Number

Emergency Number : 800-424-9300

For Chemical Emergency, Spill, Leak, Fire, Exposure, or Accident, call CHEMTREC – Day or Night

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the Substance or Mixture

Classification (GHS-US)

Not classified

2.2. Label Elements

GHS-US Labeling

No labeling applicable

2.3. Other Hazards

Other Hazards: No additional information available

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	%	Classification (GHS-US)
Silica Mesh Fabric	(CAS No) 65997-17-3	92 - 98	Carc. 1B, H350
Phenolic resin	(CAS No) 9003-35-4	< 12.5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 STOT SE 3, H335
Quartz	(CAS No) 14808-60-7	< 0.2	Carc. 1A, H350 STOT SE 3, H335 STOT RE 1, H372
Boron oxide (B2O3)	(CAS No) 1303-86-2	< 0.1	Repr. 1B, H360

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

4.1. Description of First Aid Measures

First-aid Measures General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid Measures After Inhalation: When symptoms occur: go into open air and ventilate suspected area.

First-aid Measures After Skin Contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid Measures After Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

First-aid Measures After Ingestion: Rinse mouth. Do NOT induce vomiting.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/Injuries: None expected under normal conditions of use.

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

Symptoms/Injuries After Skin Contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/Injuries After Eye Contact: For particulates and dust: May cause slight irritation.

Symptoms/Injuries After Ingestion: Not expected to be a primary route of exposure.

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: Carbon dioxide, dry chemical, foam, water spray, fog. Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use water jet. Use of heavy stream of water may spread fire.

5.2. Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not flammable.

Explosion Hazard: Product is not explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

5.3. Advice for Firefighters

Firefighting Instructions: Exercise caution when fighting any chemical fire.

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

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal Precautions, Protective Equipment and Emergency Procedures

6.1.1. For Non-emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

6.1.2. For Emergency Responders

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Ventilate area.

6.2. Environmental Precautions

None known.

6.3. Methods and Material for Containment and Cleaning Up

For Containment: Contain and collect as any solid.

6.4. Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for Safe Handling

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work.

7.2. Conditions for Safe Storage, Including Any Incompatibilities

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place.

Incompatible Products: Strong acids. Strong bases. Strong oxidizers.

7.3. Specific End Use(s) No additional information available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control Parameters

Quartz (14808-60-7)		
USA ACGIH	ACGIH TWA (mg/m³)	0.025 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	0.05 mg/m³
USA IDLH	US IDLH (mg/m³)	50 mg/m³
USA OSHA	OSHA PEL (STEL) (mg/m³)	250 mppcf/%SiO_2+5, 10mg/m^3/%SiO_2+2

Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	6 mg/m³
USA IDLH	US IDLH (mg/m³)	3000 mg/m³

Boron oxide (B2O3) (1303-86-2)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m³)	10 mg/m³
USA IDLH	US IDLH (mg/m³)	2000 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³

Silica Mesh Fabric (65997-17-3)		
USA NIOSH	NIOSH REL (TWA) (mg/m³)	3 fibers/cm³ (fibers ≤3.5 µm in diameter & ≥10µm in length), TWA 5mg/m3 (total)
USA OSHA	OSHA PEL (TWA) (mg/m³)	15 mg/m³ total dust, 5 mg/m3, respirable fraction 8 hr

8.2. Exposure Controls

Appropriate Engineering Controls : Ensure all national/local regulations are observed. Avoid dust production.

Personal Protective Equipment : Not generally required. The use of personal protective equipment may be necessary as conditions warrant.

Hand Protection : Chemically resistant gloves are recommended, but not required.

Respiratory Protection : If exposure limits are exceeded or irritation is experienced, NIOSH approved respiratory protection should be worn.

Other Information : When using, do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on Basic Physical and Chemical Properties

Physical State : Solid

Appearance : Rigid, ceramic coated silica mesh filter fabric

Odor : Odorless.

Odor Threshold : No data available

pH : No data available

Relative Evaporation Rate (butylacetate=1) : No data available

Melting Point : > 1648.8 °C (3000 °F)

Freezing Point : No data available

Boiling Point : 2230 °C (4046 °F)

Flash Point : No data available

Auto-ignition Temperature : No data available

Decomposition Temperature : No data available

Flammability (solid, gas) : No data available

Vapor Pressure : No data available

Relative Vapor Density at 20 °C : No data available

Relative Density : No data available

Density : 2.2 g/cm³

Solubility : Insoluble.

Partition coefficient: n-octanol/water : No data available

Viscosity : No data available

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 at standard temperature and pressure.

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

10.4 Conditions to Avoid: Minimize dust when working with used or spent material.

10.5 Incompatible Materials: Strong acids. Strong bases. Strong oxidizers.

10.6 Hazardous Decomposition Products: The refractory coated fabric has a upper temperature limit of 3400°F. The product itself does not support combustion on its own, however, the component, Flexsil fabric, if exposed by itself, may emit the combustion products of phenolic resin, carbon monoxide and other unidentified organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information On Toxicological Effects

Acute Toxicity: Not classified

Quartz (14808-60-7)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rat	> 5000 mg/kg

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Not classified

Respiratory or Skin Sensitization: Not classified.

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified. (This product contains chemicals that when inhaled may cause cancer. For this product, these chemicals are inextricably bound within the matrix of the product. The product is not designed to be sanded or become friable in any manner during application or the lifetime of the product, nor could there be any foreseeable misuse where it could be it be sanded or become friable due to the non-drying nature of the formula. As such, there should be no exposure to the potential cancer causing chemicals within the product.)

Quartz (14808-60-7)	
IARC group	1
National Toxicity Program (NTP) Status	Known Human Carcinogens.

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: Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

Symptoms/Injuries After Skin Contact: None under normal conditions. Dust may cause irritation in skin folds or by contact in combination with tight clothing.

Symptoms/Injuries After Eye Contact: For particulates and dust: May cause slight irritation.

Symptoms/Injuries After Ingestion: Not expected to be a primary route of exposure.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity

Boron oxide (B2O3) (1303-86-2)	
EC50 Daphnia 1	370 - 490 mg/l (Exposure time: 48 h - Species: Daphnia magna)

12.2. Persistence and Degradability

CerraFlex® Molten Metal Filter Material	
Persistence and Degradability	Not established.

12.3. Bioaccumulative Potential

CerraFlex® Molten Metal Filter Material	
Bioaccumulative Potential	Not established.

12.4. Mobility in Soil No additional information available

12.5. Other Adverse Effects

Other Information : Avoid release to the environment. Hydrolyzes on exposure to water (moisture): release of toxic and corrosive gases/vapours (phenol).

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/IMDG/DOT

14.1. UN Number Not regulated for transport

14.2. UN Proper Shipping Name Not regulated for transport

14.3. Additional Information Not regulated for transport

Transport by Sea Not regulated for transport

Air Transport Not regulated for transport

SECTION 15: REGULATORY INFORMATION

15.1 US Federal Regulations

Quartz (14808-60-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Boron oxide (B2O3) (1303-86-2)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Phenolic resin (9003-35-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Silica Mesh Fabric (65997-17-3)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2 US State Regulations

Quartz (14808-60-7)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Quartz (14808-60-7)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

Boron oxide (B2O3) (1303-86-2)
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - Pennsylvania - RTK (Right to Know) List

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

Indication of Changes : Revision date: 08/06/2014

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200.

GHS Full Text Phrases:

Carc. 1A	Carcinogenicity Category 1A
Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Repr. 1B	Reproductive toxicity Category 1B
Skin Irrit. 2	Skin corrosion/irritation Category 2
Skin Sens. 1B	Skin sensitization Category 1B
STOT RE 1	Specific target organ toxicity (repeated exposure) Category 1
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H350	May cause cancer
H360	May damage fertility or the unborn child
H372	Causes damage to organs through prolonged or repeated exposure

The above information is believed to be accurate based on the most accurate data available. Niche Fluoropolymer Products makes no warranty, either expressed or implied with due respect to such information, and assumes no liability resulting from its use. Users are advised to conduct their own test to determine the safety and suitability of each product or product combination for their own purposes. Niche Fluoropolymer Products shall not be liable for claims, losses or damages of any third party or for lost profits or incidental or consequential damages.

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