



# SAFETY DATA SHEET

## REFRASIL TEXTILE PRODUCTS 2221 CLOTH AND SLIT TAPE

### Section 1. Identification

**GHS product identifier** : REFRASIL TEXTILE PRODUCTS 2221 CLOTH AND SLIT TAPE  
**Other means of identification** : Not available.  
**Product type** : Solid.

#### Identified uses

Industrial use. High Temperature Insulation; Nominal Fiber Diameter: 9 to 13 microns.

**Supplier** : HITCO Carbon Composites, Inc.  
1600 W. 135th Street  
Gardena, CA 90249  
Tel: +1-310-527-0700

**Emergency telephone number (with hours of operation)** : CHEMTREC- CCN 10580: 1 800-424-9300  
24/7

### Section 2. Hazards identification

**OSHA/HCS status** : While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.

**Classification of the substance or mixture** : Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment: 5%

#### GHS label elements

**Signal word** : No signal word.

**Hazard statements** : No known significant effects or critical hazards.

#### Precautionary statements

**Prevention** : Not applicable.

**Response** : Not applicable.

**Storage** : Not applicable.

**Disposal** : Not applicable.

#### Hazards not otherwise classified (HNOC)

**Physical hazards not otherwise classified (PHNOC)** : None known.

**Health hazards not otherwise classified (HHNOC)** : None known.

## Section 3. Composition/information on ingredients

**Substance/mixture** : Mixture.  
**Other means of identification** : Not available.

### CAS number/other identifiers

**CAS number** : Not applicable.  
**Product code** : Not available.

Ingredient name	%	CAS number
Amorphous Silica Fiber	87 - 94	7631-86-9
A proprietary polymeric coating	5 - 10	-
Chromium (III) oxide	1 - 3	1308-38-9

**There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.**

Occupational exposure limits, if available, are listed in Section 8.

## Section 4. First aid measures

### Description of necessary first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation occurs.

**Inhalation** : Remove to fresh air. Get medical attention if symptoms occur.

**Skin contact** : Wash contaminated skin with soap and water.

**Ingestion** : Wash out mouth with water.

### Most important symptoms/effects, acute and delayed

#### Potential acute health effects

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

#### Over-exposure signs/symptoms

**Eye contact** : No known significant effects or critical hazards.  
**Inhalation** : No known significant effects or critical hazards.  
**Skin contact** : No known significant effects or critical hazards.  
**Ingestion** : No known significant effects or critical hazards.

### Indication of immediate medical attention and special treatment needed, if necessary

**Notes to physician** : Treat symptomatically.  
**Specific treatments** : No specific treatment.  
**Protection of first-aiders** : No special protection is required.

See toxicological information (Section 11)

## Section 5. Fire-fighting measures

### Extinguishing media

- Suitable extinguishing media** : Use an extinguishing agent suitable for the surrounding fire.
- Unsuitable extinguishing media** : None known.

**Specific hazards arising from the chemical** : No specific fire or explosion hazard.

**Hazardous thermal decomposition products** : Decomposition products may include the following materials:  
metal oxide/oxides

**Special protective actions for fire-fighters** : No special measures are required.

**Special protective equipment for fire-fighters** : Not required.

## Section 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures

- For non-emergency personnel** : Put on appropriate personal protective equipment.
- For emergency responders** : Not required.

**Environmental precautions** : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Methods and materials for containment and cleaning up

**Spill** : Pick-up spill and place back in container.

## Section 7. Handling and storage

### Precautions for safe handling

- Protective measures** : Put on appropriate personal protective equipment (see Section 8).
- Advice on general occupational hygiene** : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities** : No special handling or storage procedures required.

## Section 8. Exposure controls/personal protection

### Control parameters

#### United States

#### Occupational exposure limits

None.

#### Canada

<u>Occupational exposure limits</u>		<u>TWA (8 hours)</u>			<u>STEL (15 mins)</u>			<u>Ceiling</u>			
<u>Ingredient</u>	<u>List name</u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>Other</u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>Other</u>	<u>ppm</u>	<u>mg/m<sup>3</sup></u>	<u>Other</u>	<u>Notations</u>
Chromium (III) oxide, measured as Cr	US ACGIH 4/2014	-	0.5	-	-	-	-	-	-	-	[a]
Chromium (III) oxide, as Cr	AB 4/2009	-	0.5	-	-	-	-	-	-	-	[3]
	BC 7/2013	-	0.5	-	-	-	-	-	-	-	
	ON 1/2013	-	0.5	-	-	-	-	-	-	-	[a]
	QC 1/2014	-	0.5	-	-	-	-	-	-	-	

[3]Skin sensitization

Form: [a]Inorganic

#### Mexico

<u>Ingredient name</u>	<u>Exposure limits</u>
Amorphous Silica Fiber	<b>NOM-010-STPS (Mexico, 9/2000).</b> LMPE-PPT: 3 mg/m <sup>3</sup> 8 hours. Form: breathable particulates LMPE-PPT: 10 mg/m <sup>3</sup> 8 hours. Form: inhalable particulates
Chromium (III) oxide	<b>NOM-010-STPS (Mexico, 9/2000).</b> LMPE-PPT: 0.5 mg/m <sup>3</sup> 8 hours.

- Appropriate engineering controls** : Good general ventilation should be sufficient to control worker exposure to airborne contaminants.
- Environmental exposure controls** : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

### Individual protection measures

- Hygiene measures** : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.
- Eye/face protection** : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts.
- Skin protection**
- Hand protection** : Not required.
- Body protection** : Not required.
- Other skin protection** : Not required.
- Respiratory protection** : Not required.

## Section 9. Physical and chemical properties

### Appearance

Physical state	: Solid.
Color	: Green.
Odor	: Not available.
Odor threshold	: Not available.
pH	: Not available.
Melting point	: 1600°C (2910°F)
Boiling point	: Not available.
Flash point	: Not available.
Evaporation rate	: Not available.
Flammability (solid, gas)	: Not available.
Lower and upper explosive (flammable) limits	: Not available.
Vapor pressure	: Not available.
Vapor density	: Not available.
Relative density	: 2.1
Solubility	: Not available.
Partition coefficient: n-octanol/water	: Not available.
Auto-ignition temperature	: Not available.
Decomposition temperature	: Not available.
Viscosity	: Not available.
Volatility	: Not available.

## Section 10. Stability and reactivity

Reactivity	: No specific test data related to reactivity available for this product or its ingredients.
Chemical stability	: The product is stable.
Possibility of hazardous reactions	: Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	: No specific data.
Incompatible materials	: Reactive or incompatible with the following materials: oxidizing materials and moisture.
Hazardous decomposition products	: Under normal conditions of storage and use, hazardous decomposition products should not be produced.

## Section 11. Toxicological information

### Information on toxicological effects

#### Acute toxicity

There is no data available.

#### Irritation/Corrosion

There is no data available.

#### Sensitization

There is no data available.

#### Carcinogenicity

##### Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Amorphous Silica Fiber	-	3	-	-	-	-
Chromium (III) oxide	-	3	-	A4	-	-

#### Specific target organ toxicity (single exposure)

There is no data available.

#### Specific target organ toxicity (repeated exposure)

There is no data available.

#### Aspiration hazard

There is no data available.

**Information on the likely routes of exposure** : Not applicable.

#### Potential acute health effects

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Symptoms related to the physical, chemical and toxicological characteristics

- Eye contact** : No known significant effects or critical hazards.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : No known significant effects or critical hazards.
- Ingestion** : No known significant effects or critical hazards.

#### Delayed and immediate effects and also chronic effects from short and long term exposure

##### Short term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

##### Long term exposure

- Potential immediate effects** : No known significant effects or critical hazards.
- Potential delayed effects** : No known significant effects or critical hazards.

##### Potential chronic health effects

- General** : No known significant effects or critical hazards.

## Section 11. Toxicological information

- Carcinogenicity** : No known significant effects or critical hazards.
- Mutagenicity** : No known significant effects or critical hazards.
- Teratogenicity** : No known significant effects or critical hazards.
- Developmental effects** : No known significant effects or critical hazards.
- Fertility effects** : No known significant effects or critical hazards.

### Numerical measures of toxicity

#### Acute toxicity estimates

There is no data available.

## Section 12. Ecological information

### Toxicity

There is no data available.

### Persistence and degradability

There is no data available.

### Bioaccumulative potential

There is no data available.

### Mobility in soil

- Soil/water partition coefficient (K<sub>oc</sub>)** : There is no data available.

- Other adverse effects** : No known significant effects or critical hazards.

## Section 13. Disposal considerations

- Disposal methods** : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

## Section 14. Transport information

	<b>DOT</b>	<b>TDG / NOM-003-SCT</b>	<b>IMDG</b>	<b>IATA</b>
<b>UN number</b>	Not regulated.	Not regulated.	Not regulated.	Not regulated.
<b>UN proper shipping name</b>	-	-	-	-

## Section 14. Transport information

<b>Transport hazard class(es)</b>	-	-	-	-
<b>Packing group</b>	-	-	-	-
<b>Environmental hazards</b>	No.	No.	No.	No.
<b>Additional information</b>	-	-	-	-

**AERG** : Not applicable.

**Special precautions for user** : None.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

## Section 15. Regulatory information

**U.S. Federal regulations** : **United States inventory (TSCA 8b)**: Not determined.  
**Clean Water Act (CWA) 307**: Chromium (III) oxide

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**DEA List II Chemicals (Essential Chemicals)** : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Not applicable.

**SARA 313**

	<b>Product name</b>	<b>CAS number</b>	<b>%</b>
<b>Form R - Reporting requirements</b>	Chromium (III) oxide	1308-38-9	1 - 3
<b>Supplier notification</b>	Chromium (III) oxide	1308-38-9	1 - 3

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.



## Section 15. Regulatory information

### State regulations

- Massachusetts** : The following components are listed: Amorphous Silica Fiber; Chromium (III) oxide
- New York** : None of the components are listed.
- New Jersey** : The following components are listed: Chromium (III) oxide
- Pennsylvania** : The following components are listed: Amorphous Silica Fiber; Chromium (III) oxide
- California Prop. 65**  
No products were found.

### Canada

#### Canadian lists

- Canadian NPRI** : The following components are listed: Chromium (III) oxide
- CEPA Toxic substances** : None of the components are listed.
- Canada inventory** : Not determined.

### International lists

#### National inventory

- Australia** : Not determined.
- China** : Not determined.
- Europe** : Not determined.
- Japan** : Not determined.
- Malaysia** : Not determined.
- New Zealand** : Not determined.
- Philippines** : Not determined.
- Republic of Korea** : Not determined.
- Taiwan** : Not determined.

## Section 16. Other information

### History

- Date of issue mm/dd/yyyy** : 06/30/2015
- Version** : 1
- Prepared by** : KMK Regulatory Services Inc.

### Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.