

SAFETY DATA SHEET

REFRASIL AR100 SERIES ABRASION RESISTANT CLOTH

Revision Date: 19-4-2019

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1. IDENTIFICATION OF THE MATERIAL AND SUPPLIER

Product Name : Refrasil AR100 Series Abrasion Resistant Cloth
Other Means of Identification : Woven Textile Cloth of a Rusty / Orange Colour
Other Names : AR100-48; AR100-96
Product Use: High temperature insulation, welding blankets and curtains, weld grade cloths abrasion resistant – Nominal continuous filament diameter is 9-13 microns.

Distributor

Associated Gaskets Pty Ltd
68 Marigold Street
Revesby NSW 2212
Australia

Phone : 61 (0)2 9774 3333
Fax : 61 (0)2 9774 1100
Poisons Information Centre
13 11 26 from anywhere in Australia
and 0800 764 766 in New Zealand

Manufacturer

Hitco Carbon Composites, Inc.
1600 W. 135th Street
Gardena, CA 90249
United States of America

Phone: 0011 1 310 527 - 0710
CHEMTREC USA 24 hour Emergency Assistance: 0011 1 800 424 - 9300

2. HAZARDS IDENTIFICATION

Classification of the Substance or Mixture Non-hazardous according to GHS.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterisation:	Mixture	
Ingredients (Common Name)	CAS No	Concentration
Silica (amorphous silica fibres)	7631-86-9	90 - 95%
Polyurethane Coating	Mixture	5 - 10%

4. FIRST AID MEASURES

Inhalation Remove to fresh air. Drink water to clear throat and blow nose to remove fibres. Seek medical attention if irritation persists.

Ingestion Wash mouth with water. Drink extra water to assist natural elimination. Never give anything by mouth to an unconscious person. Seek medical attention if gastrointestinal irritation persists or if abdominal pain, nausea and vomiting occur.

Skin In case of skin contact, remove contaminated clothing if necessary and gently wash affected areas with water and soap. Seek medical attention if irritation persists.

Eyes In case of eye contact, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical attention if irritation persists.

5. FIRE FIGHTING MEASURES

For major fires call the Fire Brigade. Ensure that an escape path is available from any fire.

Suitable Extinguishing Media Use extinguishing media suitable for surrounding fire.

Hazardous Combustion Products Oxides of carbon and nitrogen.

Special Protective Equipment and Precautions for Fire Fighters Wear Safe Work Australia approved self-contained breathing apparatus and full protective clothing.

Unusual Fire or Explosion Hazards There is no potential for spontaneous fire or explosion.

Hazchem Code Not allocated.

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6. ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures	Wear Safe Work Australia approved full protective clothing. Do not breathe dust. Ensure adequate ventilation.
Environmental Precautions	Do not allow product to enter drains or water courses.
Methods and Materials for Containment and Cleaning Up	Collect mechanically. Vacuum, as appropriate, remaining dust on floor. Avoid generating dust. If sweeping is necessary, use a dust suppressant such as water. Place into containers and dispose according to applicable local and state government regulations.

7. HANDLING AND STORAGE

Precautions for Safe Handling	Use of safe work practices are recommended to avoid eye or skin contact and inhalation of dust. Prevent generating dust. Food, beverages and tobacco products should not be stored or consumed where this material is in use. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.
Conditions for Safe Storage	Store in original container in a cool, dry and well ventilated area. Keep away from fluorine, oxygen difluoride, chlorine bifluoride and alkalis. Protect from extreme temperatures.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters - Exposure Standards (Safe Work Australia)	Fumed silica (7631-86-9) - respirable dust: TWA: - ppm / 2 mg/m ³ STEL: - ppm / - mg/m ³ Cristobalite (14464-46-1) - respirable dust: TWA: - ppm – 0.1 mg/m ³ STEL: - ppm - mg/m ³ Rogue dust: TWA: - ppm / 10 mg/m ³ STEL: - ppm / - mg/m ³
Engineering Controls	Maintain air concentration below occupational exposure standards, using engineering controls (ventilation).
Personal Protective Equipment (PPE)	
Respiratory Protection	If all workplace limits are observed and good ventilation is ensured, no special precautions necessary. A respirator should be used if ventilation is unavailable, or is inadequate for keeping dust and fibre levels below the applicable exposure limits. See Australian Standards AS/NZS 1715 and 1716 for more information.
Eye/Face Protection	Safety glasses with side shields are recommended to keep dust out of the eyes. See Australian Standards AS/NZS 1336 and 1337 for more information.
Skin Protection	Leather or cotton gloves and overall should be worn to prevent skin contact and irritation. See Australian Standards AS/NZS 2161, 2210.1 and 2210.2 for more information.
Thermal Hazards	No information available.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Orange solid
Odour	Almost odourless
Odour Threshold	No information available
pH	Not applicable
Melting Point / Freezing Point	<1593°C
Initial Boiling Point / Range	Not applicable
Flash Point (Pensky – Martin Closed Cup)	Not applicable
Evaporation Rate	Not applicable
Lower Flammability or Explosive Limit	Not applicable
Upper Flammability or Explosive Limit	Not applicable
Vapour Pressure	Not applicable
Vapour Density	Not applicable
Relative Density (Specific Gravity)	2.10
Solubility in Water	Insoluble
Solubility in Ethanol	No information available
Partition coefficient: n-octanol /water	No information available
Auto-ignition Temperature	Not applicable
Decomposition Temperature	No information available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable at ambient temperature and under normal conditions of use.
Possibility of Hazardous Reactions	No hazardous reactions known.
Conditions to Avoid	Extreme temperatures.
Incompatible Materials	Fluorine, oxygen difluoride, chlorine bifluoride and alkalis.
Hazardous Decomposition Products	Oxides of carbon and nitrogen. If this material is used at temperatures exceeding 982°C it may undergo partial conversion to cristobalite, a form of crystalline silica, which if inhaled in sufficient quantity may cause severe respiratory disease (pneumoconiosis).

11. TOXICOLOGICAL INFORMATION

Toxicity	Silica: Oral LD ₅₀ (rat) > 5000 mg/kg Dermal LD ₅₀ (rabbit) > 2000 mg/kg
Acute Health Effects	
Skin Corrosion/Irritation	Dust particles from handling or abrasion may cause mechanical irritation of the skin.
Serious Eye Damage/Irritation	Dust particles from handling or abrasion may cause mechanical irritation of the eye.
Respiratory or Skin Sensitisation	No sensitizing effects known.
Germ Cell Mutagenicity	No information available.

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Continuation of Section 11. TOXICOLOGICAL INFORMATION

Carcinogenicity	Silica, amorphous is classified by IARC as a Group 3 - Not classifiable as to its carcinogenicity to humans. Silica dust, crystalline, in the form of quartz or cristobalite is classified by IARC as a Group 1 - Carcinogenic to humans.
Reproductive Toxicity	No information available.
Specific Target Organ Toxicity (STOT) - Single Exposure	No information available.
Specific Target Organ Toxicity (STOT) -Repeated Exposure	No information available.
Aspiration Hazard	No information available.
Routes of Exposure	Inhalation: Dust particles from the product may be irritating to the upper respiratory tract and cause coughing, nasal congestion and sore throat. Ingestion: Not an expected route of exposure. May cause gastrointestinal irritation if swallowed. Eye: Dust particles from handling or abrasion may cause mechanical irritation of the eye. Skin: Dust particles from handling or abrasion may cause mechanical irritation of the skin.
Chronic Health Effects	Prolonged exposure to respirable crystalline silica can cause silicosis. If this material is used at temperatures exceeding 982°C it may undergo partial conversion to cristobalite, a form of crystalline silica, which if inhaled in sufficient quantity may cause severe respiratory disease (pneumoconiosis).
Existing Conditions Aggravated by Exposure	Pre-existing chronic respiratory, skin, or eye diseases or conditions.

12. ECOLOGICAL INFORMATION

Ecotoxicity	Aquatic Organisms: LC ₅₀ (Brachydanio rerio) = 5000 mg/L – 96 hr (static) EC ₅₀ (Selenastrum capricornutum) = 440 mg/L – 72 hr EC ₅₀ (Ceriodaphnia dubia) = 7600 mg/L – 48 hr
Persistence and Degradability	No information available.
Bio accumulative Potential	No information available.
Mobility in Soil	No information available.

13. DISPOSAL CONSIDERATIONS

Disposal Methods and Containers	Dispose according to applicable local and state government regulations.
Special Precautions for Landfill or Incineration	Please consult your state Land Waste Management Authority for more information.

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14. TRANSPORT INFORMATION

Not classified as a dangerous good according to the Australian Code for the Transport of Dangerous goods by road or rail (ADG 7).

UN Number	Not applicable
Proper Shipping Name	Not applicable
Dangerous Goods Class	Not applicable
Subsidiary Risk	Not applicable
Hazchem Code	Not applicable
Packing Group	Not applicable
Special Provisions	Not applicable
Limited Quantities	Not applicable
Packaging & IBCs - Packing Instruction	Not applicable
Packaging & IBCs - Special Packing Provisions	Not applicable
Portable Tanks & Bulk Containers – Instructions	Not applicable
Portable Tanks & Bulk Containers – Spec Provisions	Not applicable

SEA TRANSPORT – IMDG

UN Number	Not applicable
Proper Shipping Name	Not applicable
Dangerous Goods Class	Not applicable
Packing Group	Not applicable
EMS Number	Not applicable

AIR TRANSPORT – ICAO / IATA

UN Number	Not applicable
Proper Shipping Name	Not applicable
Dangerous Goods Class	Not applicable
Packing Group	Not applicable

15. REGULATORY INFORMATION

Silica is listed in the Australian Inventory of Chemical Substances (AICS).

16. OTHER INFORMATION

Last Revision of MSDS : March 18th 2009 **Prepared by** : MSDS.COM.AU Pty Ltd
Abbreviations Used : **GHS**: Globally Harmonised System of Classification and Labelling of Chemicals
IARC: International Agency for Research on Cancer
STEL: Short term exposure limit **TWA**: Time weighted average

Emergency Contacts

Associated Gaskets Pty Ltd : 61 (0)2 9774 3333
Police and Fire Brigade : 000
Poisons Information Centre : 13 11 26 from anywhere in Australia, (0800 764 766 in New Zealand)

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This MSDS is prepared in accord with the Safe Work Australia document "Code of Practice for the Preparation of Safety Data Sheets for Hazardous Chemicals."