

REFREX® 1200 WOVEN FABRICS

According to REACH Regulation (EC) 1907/2006 and (EC) No 1272/2008

1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

Tradename : Refrex® 1200 Ceramic Fibre 312 with Organic Sizing

Product identification numbers

98-0400-0106-1 98-0400-0147-5 98-0400-5907-7 98-0400-5911-9

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses

Ceramic Fibre

Identification of the company

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2. HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Regulation (EC) No 1272/2008

Classification of the substance/ mixture

Not applicable

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

This product is considered an article and is exempt from hazard classification.

2.2. Label elements

CLP Direction (EG) nr. 1272/2008

Not applicable

Dangerous substances(67/548/EEC)/preparations(1999/45/EC) directive

Not applicable

2.3. Other hazards

None known.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS Nbr	EU Inventory	% by Wt	Classification
Aluminoborosilicate	12788-79-3		95 - 100	
Organic sizing Trade Secret			0 - 5	

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Please see section 16 for the full text of any R phrases and H statements referred to in this section
Please refer to section 15 for the any applicable Notas that have been applied to the above components

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS

4. FIRST-AID MEASURES

4.1. Description of first aid measures

Inhalation

No need for first aid is anticipated.

Skin contact

Wash with soap and water. If signs/symptoms develop, get medical attention.

Eye contact

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, get medical attention.

If swallowed

Rinse mouth. If you feel unwell, get medical attention.

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

See Section 11.1 Information on toxicological effects

4.3. Indication of any immediate medical attention and special treatment required

Not applicable

5. FIRE-FIGHTING MEASURES

5.1. Extinguishing media

Non-combustible. Choose material suitable for surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

5.3. Advice for fire-fighters

No unusual fire or explosion hazards are anticipated.

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Not applicable.

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6.2. Environmental precautions

Not applicable.

6.3. Methods and material for containment and cleaning up

Not applicable.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

This product is considered to be an article which does not release or otherwise result in exposure to a hazardous chemical under normal use conditions.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations. See Section 8 for exposure controls and personal protection recommendations.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this Safety Data Sheet.

8.2. Exposure controls

8.2.1. Engineering controls

Not applicable.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

As a good industrial hygiene practice:

Wear eye/face protection.

The following eye protection(s) are recommended: Safety glasses with side shields.

Skin/hand protection

Skin protection is not required.

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Respiratory protection

Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection.

Thermal hazards

Wear heat insulating gloves when handling this material to prevent thermal burns.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Physical state	Solid.
Appearance/Odour	Textile grade fibers which are equal to or greater than 7 microns in diameter, shiny, white, thread, yarn or fabric.
Odour threshold	Not applicable.
pH	Not applicable.
Boiling point/boiling range	Not applicable.
Melting point	$\geq 1,800^{\circ}\text{C}$
Flammability (solid, gas)	Not classified
Explosive properties	Not classified
Oxidising properties	Not classified
Flash point	Not applicable.
Autoignition temperature	No data available.
Flammable Limits(LEL)	Not applicable.
Flammable Limits(UEL)	Not applicable.
Vapour pressure	Not applicable.
Relative density	2.70 - 3.05 [Ref Std:WATER=1]
Solubility- non-water	Not applicable.
Partition coefficient: n-octanol/water	No data available.
Evaporation rate	Not applicable.
Vapour density	Not applicable.
Decomposition temperature	Not applicable.
Density	2.7 - 3.05 g/cm ³

9.2. Other information

Volatile organic compounds (VOC)	No data available.
VOC less H ₂ O & exempt solvents	No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

This material is considered to be non reactive under normal use conditions

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10.2 Chemical stability

Stable.

10.3 Possibility of hazardous reactions

Hazardous polymerisation will not occur.

10.4 Conditions to avoid

None known.

10.5 Incompatible materials

None known.

10.6 Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide.	At elevated temperatures.
Irritant vapours or gases.	At elevated temperatures.

Under recommended usage conditions, hazardous decomposition products are not expected. Hazardous decomposition products may occur as a result of oxidation, heating, or reaction with another material.

11. TOXICOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labelling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1 Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation

No health effects are expected.

Skin contact

Mechanical skin irritation: Signs/symptoms may include abrasion, redness, pain, and itching.

Eye contact

Mechanical eye irritation: Signs/symptoms may include pain, redness, tearing and corneal abrasion.

Ingestion

Physical Blockage: Signs/symptoms may include cramping, abdominal pain, and constipation.

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Additional information:

- This product, when used under reasonable conditions and in accordance with the Insulcon directions for use, should not present a health hazard. However, use or processing of the product in a manner not in accordance with the product's directions for use may affect the performance of the product and may present potential health and safety hazards. Due to their large size (7-15 microns in diameter), Refrex Ceramic Fibers are considered non-respirable and, therefore, are not expected to pose a cancer risk. Fibers are defined as respirable by ECHA as having a length weighted geometric mean diameter less two standard geometric errors of 6 or less micrometers (µm). Refrex fibers do not meet this condition.

Toxicological Data

Acute Toxicity

Name	Route	Species	Value
Aluminoborosilicate			Data not available or insufficient for classification
Organic sizing	Dermal	Rabbit	LD50>20,000 mg/kg
Organic sizing	Ingestion	Rat	LD50 32,770 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Aluminoborosilicate		Data not available or insufficient for classification
Organic sizing	Rabbit	Minimal irritation

Serious Eye Damage/Irritation

Name	Species	Value
Aluminoborosilicate		Data not available or insufficient for classification
Organic sizing	Rabbit	Mild irritant

Skin Sensitisation

Name	Species	Value
Aluminoborosilicate		Data not available or insufficient for classification
Organic sizing	Guinea pig	Not sensitizing

Respiratory Sensitisation

Name	Species	Value
Aluminoborosilicate		Data not available or insufficient for classification
Organic sizing		Data not available or insufficient for classification

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Germ Cell Mutagenicity

Name	Species	Value
Aluminoborosilicate		Data not available or insufficient for classification
Organic sizing	In Vitro	Not mutagenic
Organic sizing	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Aluminoborosilicate			Data not available or insufficient for classification
Organic sizing	Ingestion	Rat	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
Aluminoborosilicate		Data not available or insufficient for classification			
Organic sizing	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,125 mg/kg/day	during gestation
Organic sizing	Ingestion	Not toxic to male reproduction	Rat	NOAEL 5699 +/- 1341 mg/kg/day	5 days
Organic sizing	Not specified	Some positive reproductive/developmental data exist, but the data are not sufficient for classification		NOEL N/A	
Organic sizing	Ingestion		Mouse	NOAEL 562 mg/animal/day	during gestation

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Target Organ(s)

Specific Target Organ Toxicity – single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Aluminoborosilicate			Data not available or insufficient for classification			
Organic sizing	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.008 mg/l	2 weeks

Specific Target Organ Toxicity – repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Aluminoborosilicate			Data not available or insufficient for classification			
Organic Sizing	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 1.008 mg/l	2 weeks

Organic Sizing	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 5,640 mg/kg/day	13 weeks
Organic Sizing	Ingestion	heart, endocrine system, hematopoietic system, liver, nervous system	All data are negative	Rat	NOAEL 5,640 mg/kg/day	13 weeks

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Aspiration Hazard

Name	Value
Aluminoborosilicate	Not an aspiration hazard
Organic sizing	Not an aspiration hazard

12. ECOLOGICAL INFORMATION

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. Additional information leading to material classification in Section 2 is available upon request. In addition, environmental fate and effects data on ingredients may not be reflected in this section because an ingredient is present below the threshold for labelling, an ingredient is not expected to be available for exposure, or the data is considered not relevant to the material as a whole.

12.1. Toxicity

No product test data available.
No component test data available.

12.2. Persistence and degradability

No test data available.

12.3 : Bioaccumulative potential

No test data available.

12.4. Mobility in soil

Please contact manufacturer for more details

12.5. Results of the PBT and vPvB assessment

No information available at this time, contact manufacturer for more details

12.6. Other adverse effects

No information available.

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations. This product has been classified as a non-hazardous waste. Prior to disposal, consult all applicable authorities and regulations to insure proper classification. Dispose of waste product in a permitted industrial waste facility. If no other disposal options are available, waste product may be placed in a landfill properly designed for industrial waste. The coding of a waste stream is based on the application of the product by the consumer. Since this is out of the control of Insulcon, no waste code(s) for products after use will be provided. Please refer to the European Waste Code (EWC - 2000/532/EC and amendments) to assign the correct waste code to your waste stream. Ensure national and/or regional regulations are complied with and always use a licensed waste contractor.

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EU waste code (product as sold)

101208 Waste ceramics, bricks, tiles and construction products (after thermal processing)
160304 Inorganic wastes other than those mentioned in 16 03 03

14. TRANSPORT INFORMATION

98-0400-0106-1, 98-0400-0147-5, 98-0400-5907-7, 98-0400-5911-9

Not hazardous for transportation

15. REGULATORY INFORMATION

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture Global inventory status

Contact Insulcon for more information.

15.2. Chemical Safety Assessment

Not applicable

16. OTHER INFORMATION

Revision information:

Revision Changes:

Section 1: Product name was modified.

Page Heading: Product name was modified.

Section 1: Product use information was modified.