

# REFREX® 1200

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

## 1. IDENTIFICATION OF THE PRODUCT AND OF THE COMPANY

**1.1 Tradename : Refrex® 1200**

This product is defined as an article under REACH and does not require a Safety Data Sheet under Article 31 of Regulation (EC) No. 1907/2006. Since an SDS is not required, this document does not contain all of the information that is required for substance and mixture SDSs under REACH.

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

#### Identified uses

Cermic fibre cloth

#### 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	Substance not classified As hazardous
Organic sizing	Trade Secret		0 – 2	Substance not classified As hazardous

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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.

Information on exposure limits, persistent, bioaccumulative and toxic (PBT) and very Persistent and very bioaccumulative (vPvB) properties of the ingredients can be found in sections 8 and 12 this safety data sheet.

## 4. FIRST-AID MEASURES

### 4.1. Description of first aid measures

#### Inhalation

Move person to fresh air. If concerned, seek medical advice.

#### 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

No special actions required.

**6.2. Environmental precautions**

No special actions required.

**6.3. Methods and material for containment and cleaning up**

No special actions required.

**6.4. Reference to other sections**

Refer to Section 8 and Section 13 for more information

<b>7. HANDLING AND STORAGE</b>
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**7.1. Precautions for safe handling**

Avoid skin contact with hot material. Avoid breathing of dust created by cutting, sanding, grinding or machining. 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**

Not applicable

**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.

<b>8. EXPOSURE CONTROLS / PERSONAL PROTECTION</b>
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**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.

**Biological limit values**

No biological 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**

Select and use eye/face protection to prevent contact based on the results of an exposure assessment.

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

**Skin/hand protection**

Skin protection is not required.

**During end use:**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

**Thermal hazards**

Wear heat insulating gloves when handling hot 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 <sup>3</sup>

**9.2. Other information**

Volatile organic compounds (VOC)	No data available.
Molecular weight	No data available.

## 10. STABILITY AND REACTIVITY

**10.1 Reactivity**

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

**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 agree with the EU material classification in Section 2 and/or the ingredient classifications in Section 3 if specific ingredient classifications are mandated by a competent authority. In addition, statements and data presented in Section 11 are based on UN GHS calculation rules and classifications derived from Insulcon assessments.

**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**

Vapours from heated material may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain. Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, nose and throat pain.

**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 health effects:

Due to their large size (7-15 microns in diameter), Refrex® does not meet the definition of respirable as defined by WHO convention and ECHA. Because Refrex® fibers are considered non-respirable, they are not expected to pose a cancer risk.

## Information on the following relevant hazard classes

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® does not meet the definition of respirable as defined by WHO convention and ECHA. Because Refrex® fibers are considered non-respirable, they are not expected to pose a cancer risk.

## Toxicological Data

### Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
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
Organic sizing	Rabbit	Minimal irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Organic sizing	Rabbit	Mild irritant

### Skin Sensitisation

Name	Species	Value
Organic sizing	Guinea pig	Not classified

### Respiratory sensitization

Either no data is currently available for the component(s) or the available data is insufficient for a classification.

### Germ Cell Mutagenicity

Name	Species	Value
Organic sizing	In Vitro	Not mutagenic
Organic sizing	In vivo	Not mutagenic

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### Carcinogenicity

Name	Route	Species	Value
Organic sizing	Ingestion	Rat	Not carcinogenic

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test result	Exposure Duration
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

### Target Organ(s)

#### Specific Target Organ Toxicity – single exposure

Name	Route	Target Organ(s)	Value	Species	Test result	Exposure Duration
Organic sizing	Inhalation	respiratory irritation	Not classified	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
Organic Sizing	Inhalation	respiratory system	Not classified	Rat	NOAEL 1.008 mg/l	2 weeks
Organic Sizing	Ingestion	kidney and/or bladder/ heart endocrine system/ hematopoietic system /liver/ nervous system	Not classified	Rat	NOAEL 5,640 mg/kg/day	13 weeks

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## Aspiration hazard

For the component/components, either no data is currently available or the data is not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

## 12. ECOLOGICAL INFORMATION

The following information may derive from the classification of the product in section 2 and/or from the classification of individual ingredients in section 3, which have been determined by the responsible European authority. The information in Section 12 is based on the UN-GHS calculation rules and classifications.

### 12.1. Toxicity

Name	Cas-Nr.	Organism	Value	Exposure	End Pont	Exposure Duration
Aluminoborosilicate	12788-79-3		Data not available or insufficient for classification			
Organic Sizing	Trade secret	Atlantic salmon	Experimental	96 Hours	LC(50)	>1.000 mg/l

### 12.2. Persistence and degradability

Name	Cas-Nr.	Testmethod	length of time	Metric	Result	Protocoll
Aluminoborosilicate	12788-79-3	data not available - not sufficient.			N/A	
Organic Sizing	Trade secret	experimental biodegradation	28 days	biochemical oxygen demand	53 %BSB/ThB SB	OECD 301C - MITI (I)

### 12.3 : Bioaccumulative potential

Name	Cas-Nr.	Testmethod	length of time	Metric	Result	Protocoll
Aluminoborosilicate	12788-79-3	Data not available or insufficient for classification	N/A	N/A	N/A	N/A
Organic Sizing	Trade secret	Estimated Bioconcentration	28 days	bioaccumulative factor	2.3	Estimate: bioconcentration factor



**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.

**EU waste code (product as sold)**

101208 Waste ceramics, bricks, tiles and construction products (after thermal processing)

### 14. TRANSPORT INFORMATION

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

The above information represents our current experience and describes the product only in terms of to safety requirements. It is up to the customer to check before using the product whether it is also in compliance with regard to possible application-effective influences, it is suitable for its intended purpose. All warranty and liability issues for this product are governed by our general terms and conditions of sale, unless statutory provisions provide otherwise.

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