

## SECTION 1: Identification

### 1.1. Identification

Product form	: Article
Product name	: GRADE 1000X
Type of product	: Microporous high temperature insulation, Grade family : 1000X and related products. Valid for : PROMALIGHT®-1000X, PROMALIGHT® MACHINED PARTS-1000X, STEELFLEX®-1000X, PROMAGUARD®, AEROGUARD®-128 SD/ED/HD, AEROGUARD®-160 SD/ED/HD, AEROGUARD®-190 SD/ED/HD, AEROGUARD®-220 SD/ED/HD, MICROTHERM® SLATTED-1000X, MICROTHERM® PANEL-1000X

### 1.2. Recommended use and restrictions on use

Recommended use	: High temperature insulation.
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### 1.3. Supplier

#### Supplier

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[info@microtherm.be](mailto:info@microtherm.be) - [www.promat-industry.com](http://www.promat-industry.com)

#### Other

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Vleugelboot 22  
3991 CL Houten - THE NETHERLANDS  
T +31 30 241 0770 - F +31 30 241 0771

#### Other

Promat UK Limited  
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OL10 2TS Heywood - UNITED KINGDOM  
T +44 (0)800 588 4444  
[sales@promat.co.uk](mailto:sales@promat.co.uk)

#### Other

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T +33 (0)432 44 44 44  
[fds.efbp@etexgroup.com](mailto:fds.efbp@etexgroup.com) - [www.promat.fr](http://www.promat.fr)

#### Other

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#### Other

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#### Other

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T +45 7366 1999  
[Promat-dk@etexgroup.com](mailto:Promat-dk@etexgroup.com) - [www.promat.com/da-dk](http://www.promat.com/da-dk)

#### Other

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T +420 224 390 811 - F +420 233 333 576  
[promat@promatpraha.cz](mailto:promat@promatpraha.cz) - [www.promatpraha.cz](http://www.promatpraha.cz)

#### Other

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### Other

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### Other

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## 1.4. Emergency telephone number

Emergency number : Please contact a regional poison center or emergency telephone number.

## SECTION 2: Hazard(s) identification

### 2.1. Classification of the substance or mixture

#### GHS US classification

Not classified

### 2.2. GHS Label elements, including precautionary statements

No labelling obligation.

### 2.3. Other hazards which do not result in classification

Other hazards which do not result in classification : Can occur: eye irritation, irritation of mucous membranes and skin irritation. During machining the product (drilling, cutting, sanding, etc.), airborne dust can be released. As with most types of nuisance dust, excessive inhalation of dust may cause irritation of the bronchial tubes. Some raw materials may contain traces of natural occurring quartz. The inhalation of quartz containing dust, in particular the fine dust fraction (respirable size), in high concentrations or over repeated or prolonged periods of time can be hazardous to health and may lead to chronic lung disease and an increased risk of lung cancer. This risk will be minimal if correct working practices are observed and applied. (Refer to Section 8). According to the International Agency for Research on Cancer (IARC Monograph Volume 100C - 2012) "Crystalline silica inhaled in the form of quartz or cristobalite is carcinogenic to humans (Group 1).

Some products of this GRADE family are supplied encapsulated in covering materials, such as woven glass cloth, non-woven polyester cloth, PE foil, aluminium foil and mica sheet. Some fibres, glass threads, covering materials or adhesives may be used that contain some organic fraction which may decompose upon first heating.

### 2.4. Unknown acute toxicity (GHS US)

Not established.

## SECTION 3: Composition/information on ingredients

### 3.1. Substances

Not established.

### 3.2. Mixtures

Not established.

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### 3.3. Article

Components : Amorphous silica, silicon carbide, continuous filament fibre

## SECTION 4: First-aid measures

### 4.1. Description of first aid measures

First-aid measures general : Seek medical attention if ill effect or irritation develops.  
First-aid measures after inhalation : Remove to fresh air and drink water. Seek medical attention if irritation or symptoms persist.  
First-aid measures after skin contact : Rinse affected areas with water, taking care not to scratch or rub. Seek medical attention if irritation or symptoms persist.  
First-aid measures after eye contact : Do not rub the eye. Rinse immediately with plenty of water. If eye irritation persists: Get medical advice/attention.  
First-aid measures after ingestion : Ingestion unlikely due to product form. Do not induce vomiting. Rinse mouth. Drink plenty of water. Call a POISON CENTER/doctor if you feel unwell.

### 4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation : May cause irritation to the respiratory tract and to other mucous membranes.  
Symptoms/effects after skin contact : May cause temporary irritation/skin rash. Repeated exposure may cause skin dryness or cracking.  
Symptoms/effects after eye contact : May cause temporary eye irritation.  
Symptoms/effects after ingestion : None known.

### 4.3. Immediate medical attention and special treatment, if necessary

No data available.

## SECTION 5: Fire-fighting measures

### 5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media : All extinguishing media can be used.

### 5.2. Specific hazards arising from the chemical

Explosion hazard : Product is not explosive.  
Reactivity in case of fire : The product is non-combustible.  
Covering : can be organic or contain organic components which can decompose when heated to temperatures greater than 150°C, emitting toxic gases.

### 5.3. Special protective equipment and precautions for fire-fighters

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

General measures : Minimise generation of dust. Avoid breathing dusts. Avoid eye and skin contact. Dampen down any dust or use vacuum cleaner with correct filter.

#### 6.1.1. For non-emergency personnel

Measures in case of dust release : Use recommended respiratory protection. Prevent spread of dust. Dampen down any dust or use vacuum cleaner with correct filter.

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### 6.1.2. For emergency responders

Protective equipment : Use personal protective equipment as required.

### 6.2. Environmental precautions

Prevent spread of dust. Do not allow to enter drains or water courses.

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

For containment : Use closed containers to avoid dust release.  
Methods for cleaning up : Shovel up small pieces. Dampen down any dust before putting into appropriate skips.

### 6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Additional hazards when processed : Handling of products of this GRADE family, especially in an encapsulated form, is unlikely to generate significant quantities of airborne dust.  
Dust, generated during machining and processing must be exhausted and the regulatory occupational exposure limits (workplace exposure limits in UK) must be respected.

Precautions for safe handling : Work in a well ventilated area. Use tools with appropriate dust exhaust equipment. Use always respiratory protective equipment when exposures are likely or can be foreseen to exceed the Occupational Exposure Limits or Workplace Exposure Limits in UK (refer to local regulations). Collect dust with a vacuum cleaner or soak with water before sweeping up.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

### 7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Store in dry, covered and frost proof area.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Silicon carbide (not in fibre form) (409-21-2)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Silicon carbide
ACGIH OEL TWA	10 mg/m <sup>3</sup> (Non fibrous. I - Inhalable particulate matter, E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica) 3 mg/m <sup>3</sup> (Non fibrous. R - Respirable particulate matter, E - The value is for particulate matter containing no asbestos and < 1 % crystalline silica) 0.1 fibers/cm <sup>3</sup> (Fibrous (including whiskers). F - Respirable fibers)
Remark (ACGIH)	Non fibrous = TLV® Basis: URT irr Fibrous (including whiskers) = TLV® Basis: Mesothelioma; cancer. Notations: A2 (Suspected Human Carcinogen)
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Silicon carbide
OSHA PEL TWA [1]	5 mg/m <sup>3</sup> (Respirable fraction) 15 mg/m <sup>3</sup> (Total dust)
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

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### 8.2. Appropriate engineering controls

Appropriate engineering controls : Provide appropriate exhaust ventilation at places of dust forming. Ensure exposure is below occupational exposure limits (where available).

### 8.3. Individual protection measures/Personal protective equipment

<b>Hand protection:</b>
Protective gloves
<b>Eye protection:</b>
Safety glasses with side shields
<b>Skin and body protection:</b>
Wear suitable protective clothing
<b>Respiratory protection:</b>
In case of insufficient ventilation, wear suitable respiratory equipment

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Grey
Odour	: None
Odour threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: No data available
Boiling point	: No data available
Flash point	: No data available
Relative evaporation rate (butylacetate=1)	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive limits	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available

### 9.2. Other information

No additional information available.

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### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

#### 10.2. Chemical stability

Stable under normal conditions.

#### 10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

#### 10.4. Conditions to avoid

Do not use the product at temperatures in excess of the maximum recommended operating temperature.

#### 10.5. Incompatible materials

No additional information available.

#### 10.6. Hazardous decomposition products

Core insulation : thermally stable to the recommended maximum operating temperature.

Covering : can be organic or contain organic components which can decompose when heated to temperatures greater than 150°C, emitting toxic gases.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified  
Acute toxicity (dermal) : Not classified  
Acute toxicity (inhalation) : Not classified

#### Aluminium oxide (1344-28-1)

LD50 oral rat	≥ 5000 mg/kg
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Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified (Non-fibrous silicon carbide (SiC) is used in this GRADE family. The non-fibrous forms of SiC are not classified by regulation (EC) 1272/2008 as carcinogenic.)
Reproductive toxicity	: Not classified
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Aspiration hazard	: Not classified
Viscosity, kinematic	: No data available
Symptoms/effects after inhalation	: May cause irritation to the respiratory tract and to other mucous membranes.
Symptoms/effects after skin contact	: May cause temporary irritation/skin rash. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: May cause temporary eye irritation.
Symptoms/effects after ingestion	: None known.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Graphite (7782-42-5)	
LC50 - Fish [1]	> 100 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 100 mg/l Test organisms (species): Daphnia magna
NOEC (chronic)	47 mg/l Test organisms (species): Daphnia magna Duration: '21 d'

#### 12.2. Persistence and degradability

No additional information available.

#### 12.3. Bioaccumulative potential

No additional information available.

#### 12.4. Mobility in soil

No additional information available.

#### 12.5. Other adverse effects

No additional information available.

### SECTION 13: Disposal considerations

#### 13.1. Disposal methods

Regional legislation (waste)	: Dispose of in accordance with relevant local regulations.
Product/Packaging disposal recommendations	: Product (even after use above recommended operating temperature) is not classified as hazardous waste and may generally be disposed of at a normal landfill site that has been licensed for the disposal of industrial waste.

### SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

#### 14.1. UN number

Not regulated for transport

#### 14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Not established.
Proper Shipping Name (TDG)	: Not established.
Proper Shipping Name (IMDG)	: Not established.
Proper Shipping Name (IATA)	: Not established.

#### 14.3. Transport hazard class(es)

**DOT**  
Transport hazard class(es) (DOT) : Not established.

**TDG**  
Transport hazard class(es) (TDG) : Not established.

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### IMDG

Transport hazard class(es) (IMDG) : Not established.

### IATA

Transport hazard class(es) (IATA) : Not established.

#### 14.4. Packing group

Packing group (DOT) : Not established.  
Packing group (TDG) : Not established.  
Packing group (IMDG) : Not established.  
Packing group (IATA) : Not established.

#### 14.5. Environmental hazards

Other information : No supplementary information available.

#### 14.6. Special precautions for user

##### DOT

No data available

##### TDG

No data available

##### IMDG

No data available

##### IATA

No data available

#### 14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not established.

## SECTION 15: Regulatory information

#### 15.1. US Federal regulations

Commercial status of components according to the United States Environmental Protection Agency's Toxic Substances Control Act (TSCA):

Name	CAS-No.	Listing	Commercial status	Flags
Silicon carbide	409-21-2			

#### 15.2. International regulations

##### CANADA

No additional information available.

##### EU-Regulations

No additional information available.

##### National regulations

No additional information available.

#### 15.3. US State regulations

No additional information available.

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### SECTION 16: Other information

#### Indication of changes:

1.1 Product identifier - Product code. 11. Toxicological information.

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Revision date : 11/09/2021

Safety information applicable for regions : US; CAN

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.