

# Safety Data Sheet Cordierite Ceramic (Refractory Grade)

## **SECTION 1: Identification**

#### Product identifier

Product name Cordierite Ceramic (Refractory Grade)

Substance name Magnesium Aluminum Silicate

 $2MgO \bullet 2Al_2O_3 \bullet 5SiO_2$ 

Other names / synonyms Cordierite Ceramic

#### Recommended use of the chemical and restrictions on use

**Technical Ceramic Components** 

# Supplier's details

Name Superior Technical Ceramics
Address 600 Industrial Park Road

St. Albans, Vermont 05478

USA

Telephone 802-527-7726 Fax 802-527-1181

**Emergency phone number(s)** 

802-527-7726

# **SECTION 2: Hazard identification**

This product is considered an article and does not pose any health hazard under normal use. The health effects listed below may be relevant when dust is generated during machining or other processing conditions.

#### Classification of the substance or mixture

- Carcinogenicity (chapter 3.6), Cat. 1
- Specific target organ toxicity, repeated exposure (chapter 3.9), Cat. 1

## GHS label elements, including precautionary statements

# **Pictogram**



Signal word Danger

Hazard statement(s)

H335 May cause respiratory irritation H350i May cause cancer by inhalation.

H372 Causes damage to organs through prolonged or repeated exposure

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#### Precautionary statement(s)

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read and understood.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

P264 Wash thoroughly after handling.

P270 Do not eat, drink or smoke when using this product.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P308+P313 IF exposed or concerned: Get medical advice/attention.

P314 Get medical advice/attention if you feel unwell.

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

This product has the potential of generating respirable dust during machining. Dust may contain respirable crystalline silica. Prolonged inhalation of respirable crystalline silica dust may cause lung fibrosis, commonly referred to as silicosis. Principal symptoms of lung fibrosis are cough and breathlessness. Control and monitor occupational exposure to respirable crystalline silica dust in accordance to federal, state and local laws.

# **SECTION 3: Composition/information on ingredients**

## Components

#### 1. Cordierite

Concentration 90 - 99 %

Other names / synonyms Cordierite CAS no. 1302-88-1

#### 2. Silicates (less than 1% crystalline silica). Soapstone, respirable dust

Concentration 1 - 10 %

Other names / synonyms Silicates (less than 1% crystalline silica), Soapstone, respirable dust

#### **SECTION 4: First-aid measures**

# Description of necessary first-aid measures

If inhaled Move to fresh air and consult with local medical personnel if discomfort

persists.

In case of skin contact Wash affected area with soap and water and consult with local medical

personnel if irritation persists.

In case of eye contact Flush with tepid water for a minimum of 15 minutes and consult with local

medical personnel if discomfort persists.

If swallowed Administer water to dilute, but not if person is unconscious. Consult with

local medical personnel if discomfort persists.

# **SECTION 5: Fire-fighting measures**

## Suitable extinguishing media

Use any means suitable for extinguishing surrounding fire.

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#### Specific hazards arising from the chemical

Use protective clothing and breathing equipment appropriate for the surrounding fire and to protect against the dust that may be dispersed in the air.

## **SECTION 6: Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

Any dust from machining should be wet mopped or dry vacuumed.

#### Methods and materials for containment and cleaning up

Any dust from machining should be wet mopped or dry vacuumed.

# **SECTION 7: Handling and storage**

#### Precautions for safe handling

Any dust from machining should be wet mopped or dry vacuumed.

# **SECTION 8: Exposure controls/personal protection**

## **Control parameters**

#### 1. Silicates (less than 1% crystalline silica), Soapstone, respirable dust

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

#### 2. Silicates (less than 1% crystalline silica), Soapstone, respirable dust

PEL (Inhalation): See Annotated Z-3 mg/m3 (OSHA)

OSHA Annotated Table Z-1, www.osha.gov

## 3. Silicates (less than 1% crystalline silica), Soapstone, respirable dust

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)

OSHA Annotated Table Z-1, www.osha.gov

#### 4. Silicates (less than 1% crystalline silica), Soapstone, respirable dust

REL (Inhalation): See Annotated Z-3 (NIOSH)

OSHA Annotated Table Z-1, www.osha.gov

## Appropriate engineering controls

Local or general exhaust ventilation recommended.

#### Individual protection measures, such as personal protective equipment (PPE)

## Eye/face protection

Safety goggles in the presence of airborne dust.

#### Skin protection

Polymer gloves for prolonged dust exposure.

#### Respiratory protection

NIOSH/MSHA approved respirator for dust when exposure limit is exceeded.

# **SECTION 9: Physical and chemical properties**

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#### Information on basic physical and chemical properties

Appearance/form Orange/Tan Solid

Odor Odorless
Odor threshold

pH

Odorless
N/A
N/A

Melting point 1460°C (2660°F)

Initial boiling point and boiling range N/A Flash point N/A Evaporation rate N/A Flammability (solid, gas) N/A Upper/lower flammability limits N/A Upper/lower explosive limits N/A Vapor pressure N/A Vapor density N/A Relative density 2.0 g/cc

Solubility(ies) Insoluble in water

Partition coefficient: n-octanol/water N/A
Auto-ignition temperature N/A
Decomposition temperature N/A
Viscosity N/A
Explosive properties N/A
Oxidizing properties N/A

# **SECTION 10: Stability and reactivity**

## **Chemical stability**

Stable

# **SECTION 11: Toxicological information**

# Information on toxicological effects

#### Respiratory or skin sensitization

See Section 2

# Carcinogenicity

See Section 2

#### STOT-repeated exposure

See Section 2

# **SECTION 12: Ecological information**

No Applicable Information Found

# **SECTION 13: Disposal considerations**

## Disposal of the product

This material is not hazardous per 40 CFR 261. Consultation with federal, state and local officials is recommended before disposal.

# **SECTION 14: Transport information**

DOT (US)

Not dangerous goods

**IMDG** 

Not dangerous goods

**IATA** 

Not dangerous goods

# **SECTION 15: Regulatory information**

#### **US FEDERAL**

**TSCA** 

CAS# 1302-88-1 is listed on the TSCA inventory.

**SARA Section 302 Extremely Hazardous Substances** 

Substance Not Listed.

Section 313

Substance Not Listed.

OSHA:

None of the chemicals in this product are considered highly hazardous by OSHA.

#### **US STATE**

Crystalline silica (airborne particles of respirable size) can be found on the following state right to know lists:

Massachusetts, New Jersey, Pennsylvania, Texas.

Consult your state and local resources for further information.

California Prop 65

Crystalline silica (airborne particles of respirable size) is known to the state of California to be a carcinogen.

## **SECTION 16: Other information**

# Further information/disclaimer

Although reasonable care has been taken to provide accurate and current information in preparation of this document, Superior Technical Ceramics extends no warranties, makes no representation and assumes no responsibility for any loss, damage, or injury of any kind which may result from reliance of information provided in this document by any person.

## **Preparation Information**

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