

SAFETY DATA SHEET

Date Accessed: 25/08/2023

Date Revised: 31/12/2022

SECTION 1. IDENTIFICATION

Product Name: Cordierite

CAS #: 1302-88-1

Relevant identified uses of the substance: Scientific research and development

Supplier details:

Stanford Advanced Materials

E-mail: sales@samaterials.com

Tel: (949) 407-8904

Address: 23661 Birtcher Dr., Lake Forest, CA 92630 U.S.A.

SECTION 2. HAZARDS IDENTIFICATION

NAME: CAS#: % BY WEIGHT COMMENTS:

Magnesium Oxide 1309-48-4 15-20

All oxides present as cordierite ternary

compound; 2MgO, 2Al₂O₃, 5SiO₂

Aluminum Oxide 1344-28-1 25-35

All oxides present as cordierite ternary

compound; 2MgO, 2Al₂O₃, 5SiO₂

Silicon Oxide 7631-86-9 50-60

All oxides present as cordierite ternary

compound; 2MgO, 2Al₂O₃, 5SiO₂

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Emergency Overview:

Production poses dust or machining swarf that may cause irritation to eyes, nose, throat, and/or skin.

Health Rating: Flammability Rating: Reactivity Rating: Contact Rating:

2 – Moderate 0 – None 0 – None 2 – Moderate

Lab Protective Equipment: Eye protection and proper dust collection if machining occurs.

Storage Color Code: Green (General Storage) Potential Health Effects:

Inhalation:

Hazard is principally that of a nuisance dust only as a byproduct of machining. Coughing or shortness of breath may occur in cases of excessive inhalation.

Ingestion: No adverse effects expected.

Skin Contact: No adverse effects expected but dust may cause irritation.

Eye Contact: No adverse effects expected but dust may cause irritation.

Chronic Exposure: Chronic exposure to dust may lead to pneumoconiosis.

Aggravation of

Pre-existing Conditions:

Not expected to be a health hazard.

SECTION 4. FIRST AID MEASURES

Inhalation:

Move to fresh air and consult with local medical personnel if discomfort persists.

Ingestion:

Administer water to dilute, but not if person is unconscious. Consult with local medical personnel if discomfort persists.

Eye Contact:

Flush with tepid water for a minimum of 15 minutes and consult with local

medical personnel if discomfort persists.

Skin Contact:

Wash affected area with soap and water and consult with local medical personnel if irritation persists.

SECTION 5. FIREFIGHTING MEASURES

Fire: Not considered a fire hazard.

Explosion: Not considered an explosion hazard.

Fire Extinguishing

Media:

Use any means suitable for extinguishing surrounding fire.

Special Information:

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

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

SECTION 7. HANDLING AND STORAGE

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

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure

Limits:

Only applicable if dust is generated from machining.

Ventilation System: Local or general exhaust ventilation recommended.

Personal Respirators

(NIOSH Approved):

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

Skin Protection: Polymer gloves for prolonged dust exposure.

Eye Protection: Safety goggles in the presence of airborne dust.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Orange/Tan Solid pH: NIA

Odor: Odorless Boiling Point: NIA

Solubility: Insoluble in water Melting Point: 1460°C (2660°F)

Specific Gravity: 2.0 g/cc

Vapor Pressure/

Vapor Density:

NIA

SECTION 10. STABILITY AND REACTIVITY

Chemical Stability: Stable

Hazardous Decomposition: NIA Hazardous Polymerization: NIA

Incompatibilities: NIA Conditions to Avoid: NIA

SECTION 11. TOXICOLOGICAL INFORMATION

NIA

SECTION 12. ECOLOGICAL INFORMATION

SECTION 13. DISPOSAL CONSIDERATIONS

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

SECTION 14. TRANSPORT INFORMATION

Not regulated.

SECTION 15. REGULATORY INFORMATION

SECTION 16. OTHER INFORMATION

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH). The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product.