



Safety Data Sheet Unfired Steatite

SECTION 1: Identification

Product identifier

Product name	Unfired Steatite
Substance name	Hydrated Magnesium Silicate $Mg_3Si_4O_{10}(OH)_2$
Other names / synonyms	Steatite, L4 & L5 grades steatite, Synthetic Hydrated Talc

Recommended use of the chemical and restrictions on use

Raw material for 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

Not a hazardous substance or mixture

GHS label elements, including precautionary statements

Not a hazardous substance or mixture

Other hazards which do not result in classification

Not a hazardous substance or mixture

SECTION 3: Composition/information on ingredients

Mixtures

Substance name	Magnesium Silicate
Other names / synonyms	Steatite, Talc.

Components

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1. TALC powder

Concentration 70 - 88 %

Other names / synonyms

FRENCH CHALK; HYDROUS MAGNESIUM SILICATE; MINERAL GRAPHITE; NON-ASBESTIFORM TALC; NON-FIBROUS TALC; SOAPSTONE; STEATITE; TALC; TALC (NON-ASBESTOS FORM); TALC powder; TALC, NON-ASBESTOS FORM, SILICA; TALCUM 14807-96-6

CAS no.

2. Clay

Concentration 7 - 15 %

Other names / synonyms

Clay

CAS no.

1332-58-7

3. Organic Binders

Concentration 3 - 10 %

Other names / synonyms

Organic Binders

4. Oxide Additives

Concentration 2 - 6 %

Other names / synonyms

Oxide Additives

SECTION 4: First-aid measures

Description of necessary first-aid measures

General advice

Organic portion is combustible. The dust contains crystalline silica and may cause irritation to eyes, nose, throat, and/or skin.

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.

SECTION 5: Fire-fighting measures

Suitable extinguishing media

Use any means suitable for extinguishing surrounding fire.

Specific hazards arising from the chemical

Possible Class A fire hazard – combustible vapors can develop in the headspace over the product. Flash point is 220°C (428°F).

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Special protective actions for fire-fighters

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. Kaolin, Total dust (CAS: 1332-58-7)

PEL (Inhalation): 15 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

2. Kaolin, Total dust (CAS: 1332-58-7)

REL (Inhalation): 10 mg/m³ (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

3. Kaolin, Respirable fraction (CAS: 1332-58-7)

PEL (Inhalation): 5 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

4. Kaolin, Respirable fraction (CAS: 1332-58-7)

PEL (Inhalation): 2 mg/m³, (no asbestos, < 1% crystalline silica) (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

5. Kaolin, Respirable fraction (CAS: 1332-58-7)

REL (Inhalation): 5 mg/m³ (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

6. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

7. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

8. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

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9. Silicates (less than 1% crystalline silica), Talc (containing no asbestos), respirable dust (CAS: 14807-96-6)

REL (Inhalation): See Annotated Z-3 (NIOSH)
OSHA Annotated Table Z-1, www.osha.gov

10. Soapstone

PEL (Inhalation): See Annotated Z-3 ppm (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

11. Soapstone

PEL (Inhalation): See Annotated Z-3 mg/m³ (OSHA)
OSHA Annotated Table Z-1, www.osha.gov

12. Soapstone

PEL (Inhalation): See Annotated Z-3 (Cal/OSHA)
OSHA Annotated Table Z-1, www.osha.gov

13. Soapstone

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

Information on basic physical and chemical properties

Appearance/form	Pink, Gray or Blue Chalky Solid
Odor	Odorless
Odor threshold	N/A
pH	N/A
Melting point	N/A
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	1.8-2.0 g/cc
Solubility(ies)	Organic Portion Soluble in Water
Partition coefficient: n-octanol/water	N/A
Auto-ignition temperature	N/A
Decomposition temperature	N/A

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Viscosity	N/A
Explosive properties	N/A
Oxidizing properties	N/A

SECTION 10: Stability and reactivity

Chemical stability

Stable

Hazardous decomposition products

Carbon monoxide and carbon dioxide in a fire and at temperature >220°C (428°F).

SECTION 11: Toxicological information

No Applicable Information Found

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# 14807-96-6 is listed on the TSCA inventory.

CAS#1332-58-7 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.

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US STATE

CAS# 14807-96-6 can be found on the following state right to know lists:
California, Illinois, Massachusetts, Minnesota, New Jersey, Pennsylvania, Florida.
Consult your state and local resources for further information.

California Prop 65
No components on list.

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.

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Prepared on: June 1, 2015
Last Revision: --