

SIMOND STORE

11521 Allen A Brown Rd,
Charlotte, NC 28269, USA

Material Safety Data Sheet Heat Guard Refractory Coating Material MSDS

Section 1: Chemical Product and Company Identification

Product Name: Heat Guard

CAS#: 10101-52-7

RTECS: Not Available.

TSCA: TSCA 8(b): All the ingredients are listed on the TSCA list.

CI#: Not applicable.

Synonym: High Temp. Protective Refractory Coating

Chemical Name: Zirconium (IV) silicate

Chemical Formula: ZrSiO₄

Contact Information:

Simond Store

11521 Allen A Brown Road,

Charlotte, NC 28269

US Sales: **1-469-579-8600**

Order Online: simondstore.com

Emergency Call : **1-469-579-8600**

Section 2: Composition and Information on Ingredients

Compositions:

Chemical name	CAS number	Proportion %
ZrO ₂ (+Hf O ₂)	1314-23-4	64.0 - 65.0
SiO ₂	14808-60-7	32.0 - 33.0
Fe ₂ O ₃	1309-37-1	0.08 - 0.13
TiO ₂	13463-67-7	0.30 - 0.40

Toxicological Data on Ingredients: Heat Guard LD50: Not available. LC50: No available.

Section 3: Hazards Identification

Potential Acute Health Effects: Slightly hazardous in case of skin contact (Non- hazardous), of eye contact (irritant), of ingestion, of inhalation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4: First Aid Measures

Eye Contact: Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Seek medical attention if any irritation or soreness of eye persists.

Skin Contact:

No specific first aid is required for skin contact. Remove clothing & wash skin with soap and /or water. Seek medical attention if any irritation or soreness of the skin develops.

Serious Skin Contact: Not available.

Inhalation:

Remove the victim from source of exposure into fresh air and seek medical attention if any symptoms persist.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. Seek medical attention.

Ingestion:

First aid is unlikely to be required but if necessary rinse mouth with water ensuring that mouth wash is not swallowed and seek medical attention as a precautionary measure if large amounts have been ingested.

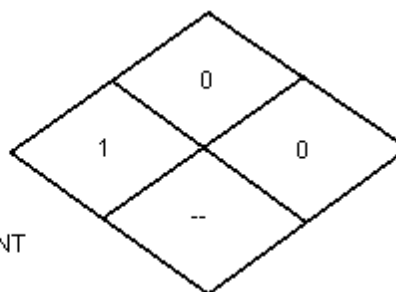
Serious Ingestion: Not available.

**** If any of the symptoms persist, seek medical attention****

Section 5: Fire and Explosion Data



4 -- EXTREME
3 -- HIGH
2 -- MODERATE
1 -- SLIGHT
0 -- INSIGNIFICANT



Flammability of the Product: Non-Flammable.

Auto-Ignition Temperature: None.

Flash Points: Non-combustible.

Flammable Limits: Not available.

Products of Combustion: None.

Hazardous Decomposition Products: Not available.

Extinguishing Media: Use extinguishing media suitable for type of surrounding fire.

Unusual Fire and Explosion Hazard: None.

Special hazards arising from the substance or mixture: Not available.

Advice for firefighters: Self-contained breathing apparatus. Wear suitable protective clothing.

Protective Equipment: Wear NIOSH certified respirator together with other protective gear appropriate to the surrounding fire.

Section 6: Accidental Release Measures

Small Spill: Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill: Wear safety equipments for normal handling, avoid generating dust. Sweep or vacuum up, recycle / reuse or dispose to landfill subject to local regulations. Transport is not regulated and no specific storage requirements.

Section 7: Handling and Storage

Precautions: Avoid contact with eyes. Wash hands thoroughly after handling. Avoid breathing. Wash contaminated clothing before reuse. Avoid inhalation and ingestion.

Storage: Transport is not regulated and there are no specific storage requirements.

Empty containers: Product packaging may contain residue. Do not reuse.

Spillage: Wear protective equipment as specified for handling. Sweep or vacuum up and reuse or dispose.

Waste disposal: Disposal to land fill subject to local regulations.

Fire explosion: Incombustible.

Fire extinguishing: Use whatever protective equipments and extinguishing agent that are suitable for primary cause of fire.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Use sufficient ventilation to keep employee exposure below recommended limits. During tear outs, use engineering controls such as local exhaust ventilation, point of generation dust collection, down draft work stations, emission controlling tool designs and materials handling equipment designed to minimize airborne fiber and dust emissions.

Personal Protection: Safety glasses, Lab coat, Dust respirator (Be sure to use an approved/certified respirator or equivalent.) and Gloves.

Personal Protection in Case of a Large Spill:

Splash goggle, Full suit, Dust respirator, Boots and Gloves. A self-contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9: Physical and Chemical Properties

Physical state and appearance: Solid in powder form with 96 % min pass through 325 # ASTM screen.

Odor: Odorless.

Molecular Weight: 183.305 g mol⁻¹

Color: White.

pH (at 25°C): 7 to 8

Boiling Point: Not available.

Melting Point: 2000-2550°C

Freezing Point: Not available.

Specific Gravity: 4.6 - 4.7 (Water = 1 @ 20 °C).

Vapor Pressure: Not pertinent

Vapor Density: Not available.

Volatility: Not available.

Evaporation rate: Not Pertinent.

Hardness: 7.5 in Mohr's Scale.

Bulk density: 1800 - 1850 kg/m³

Crystal system: Tetragonal.

Explosive: Not available.

Oxidizing: Not available.

Flammability: Noncombustible.

Solubility: Insoluble in water.

Section 10: Stability and Reactivity Data

Stability: The product is stable at normal conditions.

Instability Temperature: Not available.

Reactivity: Inert.

Chemical stability: Stable under normal conditions.

Corrosivity: Not available.

Possibility of hazardous reactions: No Significant Hazard.

Special Remarks on Corrosivity: Not available.

Conditions to avoid: Not available.

Incompatible materials: Not available.

Hazardous decomposition products: None.

Incompatibility: None in normal or expected use.

Hazardous Polymerization: Not Applicable.

Hazardous Decomposition Products: Not available.

Materials to Avoid: Not available.

Section 10: Toxicological Information

Routes of Entry: Inhalation and Ingestion.

Toxicity to Animals: Slightly hazardous in case of eye contact it may be irritant, inhalation and ingestion.

Chronic Effects on Humans: Not available.

Other Toxic Effects on Humans: Slightly hazardous in case of Eye contact (irritant), of ingestion, of inhalation.

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: Not available.

Special Remarks on other Toxic Effects on Humans:

- **Skin corrosion/irritation:** None Hazardous.
- **Serious eye damage/irritation:** May cause irritation to eyes.
- **Inhalation:** Do not inhale the material.
- **Ingestion:** Do not ingest the material

**** Keep out of reach of children ****

Section 12: Ecological Information

Eco toxicity: Not available.

BOD5 and COD: Not available.

Other adverse effects: Not applicable.

Results of PBT and vPvB assessment: Not applicable.

Mobility in soil: Not determined.

Bio accumulative potential: Not available.

Section 13: Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental control regulations. Do NOT reuse empty containers. Empty containers can be sent for disposal or recycling.

Waste Management:

To prevent waste materials from becoming airborne during waste storage, transportation and disposal, a covered container or plastic bagging is recommended.

Disposal:

This product is not classified as a hazardous waste according to Federal regulations (40 CFR 261). Check local, regional, state or provincial regulations for applicable requirements for disposal. Any processing, use, alteration or chemical additions to the product, as purchased, may alter the disposal requirements. Under Federal regulations, it is the waste generator's responsibility to properly characterize a waste material, to determine if it is a "hazardous" waste.

Section 14: Transport Information

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

The product is not classified as dangerous for carriage.

UNITED NATIONS (UN) NUMBER: Not Applicable.

NORTH AMERICA (NA) NUMBER: Not Applicable.

Section 15: Other Regulatory Information

Labeling: May be required in the USA if quartz exceeds 0.10%.

Radiological protection:

The regulations pertaining to radiological protection vary from country to country. It is the responsibility of buyer to ensure that those are met in accordance with his/her country law.

U.S. FEDERAL REGULATIONS:

Not subject to TSCA 12(b) Export Notification

SARA TITLE III:

Not subject to the provisions of SARA 313 Title III

Hazard Category For Section 311/312: None

Section 302 Extremely Hazardous Substances (TPQ): None

International Inventories

TSCA 8(b): All the ingredients are on the TSCA list.
Canadian DSL: All the ingredients are on the DSL

Other Classifications:

HMIS (U.S.A.):

Health Hazard: 1

Fire Hazard: 0

Reactivity: 0

Personal Protection: E

National Fire Protection Association

(U.S.A.): Health: 1

Flammability: 0

Reactivity: 0

Specific hazard

Protective Equipment: Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent.
Safety glasses.

Section 16: Other Information

References: Not available.

Other Special Considerations: Not available.

Created: 10/06/2010

Last Updated: 30/11/2012

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