

Material Safety Data Sheet

Lava Cloth™ - Lava Cloth Plus™ - Kiln Shelf Linen™ - Shelf Linen™

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Trade Names: Lava Cloth™ a.k.a. Lava Cloth Plus™ a.k.a. Kiln Shelf Linen™ a.k.a. Shelf Linen™

Chemical Name: Continuous filament silicon dioxide (SiO₂)/fibrous silica, amorphous silica chemical family.

Proprietarily Manufactured For: Centre DeVerre, LLC
112 Granite Street
P.O. Box 160
Suncook, NH 03275
603-485-8344

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2. COMPOSITION / INFORMATION ON INGREDIENTS

| <u>Hazardous Ingredients</u> | <u>Weight %</u> | <u>OSHA-PEL</u> | <u>ACGIH-TLV</u> | <u>OTHER</u> |
|---------------------------------------|-----------------|----------------------------|----------------------|--------------|
| Silicone dioxide, continuous filament | ≥ 90 | a. | 10 mg/m ³ | none |
| <u>Non-Hazardous Ingredients</u> | | | | |
| Sizing/bound water | ≤ 10 | -----none established----- | | |

a. OSHA has not established a specific PEL for fibrous silicone dioxide (amorphous silica). It is considered to be a "particulate not otherwise regulated" (PNOR) and is covered under the OSHA nuisance dust PEL's of 5 mg/m³ for the total dust fraction for a 8 hour TWA (Time Weighted Average). Chemically, Lava Cloth™ is amorphous silica which has an OSHA limit of 20 mppcf or 80 mg/m³.

3. HAZARDS IDENTIFICATION

PRIMARY TOUTES OF EXPOSURE: Inhalation and skin contact.

HEALTH HAZARDS (Including acute and chronic effects and symptoms of overexposure):

| | | |
|-----------------|---|---|
| <u>ACUTE:</u> | <u>Inhalation:</u> | Inhalation of dusts and fibers may result in irritation of the upper respiratory tract (mouth, nose and throat). |
| | <u>Skin Contact:</u> | Skin contact with dusts and fibers may produce itching and temporary mechanical irritation. |
| | <u>Eye Contact:</u> | Eye contact with fibers and dusts may produce temporary mechanical irritation. |
| | <u>Ingestion:</u> | Temporary mechanical irritation of the digestive track. Observe individual. If symptoms develop, consult a physician. |
| <u>CHRONIC:</u> | See carcinogenicity section below. There is no known health effects associated with chronic exposure to this product. | |

CARCINOGENICITY:

| | | | | | |
|---------------------------------------|--------------------------|--------------|-------------|------------|-------------|
| <u>Hazardous Ingredients:</u> | Listed as carcinogen by: | <u>ACGIH</u> | <u>IARC</u> | <u>NTP</u> | <u>OSHA</u> |
| Silicone dioxide, continuous filament | | NA | NA | NA | NA |

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

VENTILATION: General dilution ventilation and/or local exhaust ventilation should be provided, as necessary, to maintain exposures below PEL's or TLV's. Adequate ventilation must be provided at elevated temperatures. The base silica material is noncombustible; however, at temperatures above 250 °F, the coating may generate some light steam and/or smoke for a brief period which may require local ventilation and/or exhaust.

RESPIRATORY PROTECTION: A properly fitted NIOSHA/MHSA approved disposable dust respirator such as the 3M model 8710 or model 9900 (in high humidity environments) or equivalent should be used when: high dust levels are encountered; the level of fibers in the air exceeds the OSHA permissible exposure limits; or if irritation occurs. Use respiratory protection in accordance with your company's respiratory protection program and OSHA regulations under 29 CFR 1910.134.

EYE PROTECTION: Wear safety glasses or chemical goggles to prevent eye contact. Contact lenses should not be worn unless chemical goggles are also used and care is taken not to touch the eyes with contaminated body parts or materials. Have eye washing facilities readily available where eye contact can occur.

PROTECTIVE CLOTHING: Wear loose fitting, long sleeved shirt that covers to the base of the neck and long pants. Skin irritation from exposure to silica fibers is known to occur chiefly at pressure points such as around the neck, wrist and waist. Wear gloves when handling product.

WORK/HYGENIC PRACTICES: Handle in accordance with good industrial hygiene and safety practices:

- = Avoid unnecessary exposure to dusts and fibers
- = Remove fibers from skin after exposure
- = Be careful not to rub or scratch irritated areas. Rubbing or scratching may force the fibers into the skin. The fibers should be washed off. Use of barrier creams can, in some instances, be helpful.
- = Use vacuum equipment to remove fibers and dusts from clothing. Compressed air should never be used. Always wash work clothes separately and wipe out the washer/sink in order to prevent loose fibers from getting on other cloths.
- = Keep the work area clean of any dusts and fibers generated during fabrication. Use vacuum equipment to clean up dusts and fibers. Avoid sweeping or using compressed air as these techniques resuspend dusts and fiber into the air.
- = Have access to safety showers and eye wash fountains.
- = For professional use only. Keep out of children's reach.

9. PHYSICAL AND CHEMICAL PROPERTIES

MELTING POINT (Softening): 3000 °F

BOILING POINT (°F): NA

MAXIMUM CONTINUOUS OPERATION TEMPERATUER: ≤1800 °F

SPECIFIC GRAVITY: 2.2

PERCENT VOLITILE: NA

VAPOR PRESSURE (mm Hg): NA

VAPOR DENSITY (Air = 1): NA

EVAPORATIVE RATE (Ethyl Ether = 1): NA

SOLUBILITY IN WATER: Not Soluble

APPEARANCE AND ODOR: White/off-white/tan colored solid with no odor.

pH: NA

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10. STABILITY AND REACTIVITY

STABILITY (Conditions to Avoid): Product is stable.

INCOMPATIBILITY (Materials to Avoid): Basic phosphates, hydrofluoric acid, some oxides and hydroxides.

HAZARDOUS DECOMPOSITION PRODUCTS: Sizings or binders may decompose in a fire. Primary decomposition products include carbon monoxide, carbon dioxide, other hydrocarbons and water.

HAZARDOUS POLYMERIZATION: Will not occur.

KEY

PEL = Permissible Exposure Limit

TLV = Threshold Limit Value

OSHA = Occupational Safety & Health Administration

NIOSH = National Institute for Occupational Safety & Health Administration

IARC = International Agency for Research on Cancer

NTP = National Toxicology Program

NA = Not applicable

TWA = Time Weighted Average

ACGIH = American Conference of Industrial Hygienists

Group 1 carcinogen = A Group 1 agent is carcinogenic to humans.

LEL = Lower Exposure Limit

UEL = Upper Exposure Limit

MHSA = Mine Health & Safety Administration

a.k.a. = Also Known As

mppcf = Million Particles Per Cubic Foot

mg/m³ = Milligrams Per Cubic Meter

CFR = Code of Federal Regulations

PNOR = Particulate Not Otherwise Regulated

Common Examples of Group 1 agents are: Asbestos, Cadmium & Cadmium Compounds, Smokeless Tobacco products, Tobacco smoke, Vinyl chloride.

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