SDS Number: CX23-1A **Revised/Reviewed: 08/14/2018** **Revised From: 07/06/16**

SECTION 1 • PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME OR NUMBER:

- **CERMEX®-2300** blanket, mat or felt.
- **THERMOPAK** custom fabricated products are made using one of one or more of the above listed products.

COMPANY:	Mid-Mountain Materials, Inc.		TELEPHONE:	206-762-7600
ADDRESS:	Office:	PO Box 80266 5602 2nd Ave S Seattle, WA 98108	EMERGENCY TELEPHONE NUMBER:	800-382-2208
			FAX:	206-762-7694
	Plant:	18825 67th Ave NE Arlington, WA 98223		

SECTION 2 • HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW: May cause irritation to the eyes, skin, nose, and/or throat. Prolonged inhalation of respirable fibers may cause cancer. Dust from "after service" material contains crystalline silica (cristobalite). Exposure to respirable crystalline silica may cause lung disease (silicosis) and cancer.

US OSHA HAZARD CLASSIFICATION: Manufactures Article (dust generated from processing – hazardous carcinogen, irritant, exposure limit).

EU PREPARATION CLASSIFICATION (1999/45/EC): Manufactured Article (dust generated from processing – Carc Cat 2, Xi, R38, R49).

Refer to Section 16 for Full Text of EU Classes and R Phrases.

SECTION 3 • COMPOSITION / INFORMATION ON INGREDIENTS

CHEMICAL / COMMON NAME	CAS NUMBER	% BY WEIGHT (optional)
• Refractories, Fibers, Aluminosilicate	142844-00-6	0 – 95%
• Aluminum Oxide (fibrous) polycrystalline	1344-28-1	0 – 94%
• Continuous Filament Fiberglass	65997-17-3	0 – 10%
• Polymer Binder	Proprietary	0 – 15%

Refer to section 8 of this SDS for data on exposure limits.

SECTION 4 • FIRST-AID MEASURES

EMERGENCY/FIRST-AID MEASURES

EYE CONTACT: Do not rub your eyes. Dust particles may cause abrasive eye injury. Flush eyes with water, holding the eyelids apart for several minutes. Get medical attention if irritation persists.

SKIN CONTACT: Do not rub or scratch. Rinse exposed skin with cold water then wash skin with soap and water. Do not use hot water as that opens skin pores and may increase fiber penetration and irritation. Remove contaminated clothing and launder before re-use. Get medical attention if irritation persists.

INGESTION: If small quantities are swallowed, rinse out mouth with water. Drink plenty of water to help reduce irritation. If large amounts are swallowed or if irritation or discomfort occurs, get medical attention.

INHALATION: Remove victim to fresh air. Drink water to clear throat and blow nose to remove dust. Get medical attention if irritation persists.

SECTION 5 • FIRE-FIGHTING PROCEDURES

EXTINGUISHING MEDIA: Use water, water fog, carbon dioxide, foam, or dry chemical.

FIRE-FIGHTING PROCEDURES: Firefighters should wear full emergency equipment and NIOSH approved positive pressure self-contained breathing apparatus for all fires involving chemical products.

UNUSUAL FIRE/EXPLOSION HAZARD: This product is not classified as flammable or combustible.

HAZARDOUS PRODUCTS OF COMBUSTION: Combustion of the product binder may generate oxides of carbon.

SECTION 6 • ACCIDENTAL RELEASE MEASURES

ACCIDENTAL RELEASE MEASURES: Wear appropriate protective clothing and equipment (see section 8). Pick up material and place into a container for disposal. If dust is present, wet down and collect in a manner to minimize the generation of airborne dusts or vacuum with a high efficiency vacuum cleaner.

PERSONAL PRECAUTIONS: Avoid contact with skin, eyes, or clothing. Avoid breathing dust.

ENVIRONMENTAL PRECAUTIONS: None known.

SECTION 7 • HANDLING AND STORAGE

HANDLING: Avoid contact with eyes, skin, and clothing. Avoid creating airborne dusts. Do not breathe dust. Wear protective

clothing and equipment as described in section 8. Use only adequate ventilation. Do not eat, drink, or smoke when using this material. Launder contaminated clothing before re-use. Wash thoroughly with soap and water after handling. Follow good housekeeping practices to keep surfaces, including areas overhead such as piping, drop ceilings, ductwork, etc. Free from settled dust. Vacuum only using HEPA filtered equipment. Take special precautions when removing or handling this product after exposure to high temperatures.

Empty containers retain product residues and can be hazardous. Follow all SDS precautions when handling empty containers.

STORAGE: Store in a dry, well-ventilated area.

SECTION 8 • EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS

Use with adequate local exhaust ventilation to minimize exposures. Provide local exhaust ventilation where product is handled, cut or processed in a manner that generates dust.

PERSONAL PROTECTIVE EQUIPMENT

EYE PROTECTION: Wear safety glasses with side shields or dust proof goggles.

SKIN PROTECTION: Wear protective gloves to minimize skin contact. Barrier creams may be useful in reducing irritation.

RESPIRATORY PROTECTION: If the occupational exposure limits are exceeded or irritation is experienced, wear an approved particulate respirator. Selection of respiratory protection depends on the contaminant type, form, and concentration. Select and use in accordance with all applicable regulations (in the US follow OSHA 1910.134) and good industrial hygiene practices.

OTHER PROTECTIVE CLOTHING/EQUIPMENT: Clothing with long sleeves and pants should be worn to avoid skin contact. Washing facilities should be available in the work area. Work clothing should be laundered separately from normal clothing.

EXPOSURE GUIDELINES

• Refractories, Fibers, Aluminosilicate

ACGIH TLV: (8-hr TWA)	0.2 f/cc
OSHA PEL: (8-hr TWA)	15 mg/m^3 inhalable dust 5 mg/m^3 respirable dust

• Aluminum Oxide (fibrous) polycrystalline

OSHA PEL: (8-hr TWA)	15 mg/m^3 inhalable dust 5 mg/m^3 respirable dust

• Special Purpose Glass Fiber Respirable Size

ACGIH TLV: (8-hr TWA)	1 f/cc
OSHA PEL: (8-hr TWA)	15 mg/m^3 inhalable dust 5 mg/m^3 respirable dust 1 f/cc

• Polymer Binder

OSHA PEL: (8-hr TWA)	15 mg/m^3 inhalable dust 5 mg/m^3 respirable dust

SECTION 9 • PHYSICAL AND CHEMICAL PROPERTIES

ODOR AND APPEARANCE: White odorless bonded web

pH: N/A

MELTING POINT: >700ºC (glass fiber)

BOILING POINT: N/A

FLASH POINT: N/A

EVAPORATION RATE: N/A

FLAMMABILITY: N/A

VAPOR PRESSURE (mmHg): N/A

VAPOR DENSITY: N/A

WATER SOLUBILITY (%): Insoluble

AUTO-IGNITION TEMPERATURE: N/A

% VOLATILE: 0

SPECIFIC GRAVITY: N/A

VISCOSITY: N/A

SECTION 10 • STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under conditions of normal use.

CONDITIONS TO AVOID: Avoid dust formation.

CHEMICAL INCOMPATIBILITIES: Avoid strong acids.

HAZARDOUS DECOMPOSITION PRODUCTS: Thermal decomposition of polymer binder will generate oxides of carbon, fluorine, hydrogen fluoride, and various hydrocarbons.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION 11 • TOXICOLOGICAL INFORMATION

POTENTIAL HEALTH EFFECTS

EYES: Dust may cause mechanical irritation and possible injury.

SKIN: Dust may cause mechanical irritation.

INGESTION: May cause irritation of the mouth and intestinal tract.

INHALATION: Dust may cause nose, throat, and upper respiratory tract irritation. Symptoms include coughing, sneezing, and scratchy throat.

CHRONIC HEALTH EFFECTS: Prolonged inhalation of respirable dust from this product may cause adverse effects on lungs and is suspected to cause lung cancer. The University of Cincinnati is conducting an ongoing epidemiologic study of refractory ceramic fiber workers. To date they have seen no evidence of fibrotic lung disease. After this product has been in service at high temperatures (>1000ºC), ceramic fibers can be transformed into cristobalite, a crystalline form of silica. Exposure to respirable crystalline silica may cause a permanent, disabling, and sometimes fatal lung disease, silicosis, and lung cancer. Inhalation of air with a very high concentration of respirable silica dust can cause the most serious forms of silicosis in a matter of months or a few years.

CARCINOGENICITY: Glass wool including special purpose glass fibers (respirable size) are classified by NTP as reasonably anticipated to be a carcinogen. IARC has classified special purpose glass fibers as group 2B, possibly carcinogenic to humans. ACGIH has classified special purpose glass fibers as A3, confirmed animal carcinogen with unknown relevance to humans. Mineral wool (special purpose glass fibers) is classified as a category 3 carcinogen in the EU Dangerous Substances Directive. OSHA has not classified special purpose glass fibers. Ceramic fibers (respirable size) is classified by NTP as reasonably anticipated to be a carcinogen. IARC has classified refractory ceramic fibers as group 2B, possibly carcinogenic to humans. Refractory ceramic fibers are classified as a category 2 carcinogen in the EU Dangerous Substances Directive. Both IARC and NTP have classified respirable crystalline silica as a known human carcinogen. ACGIH has classified refractory ceramic fibers and cristobalite as A2, suspected human carcinogens. OSHA has not classified ceramic fibers or crystalline silica. None of the other components are classified as a carcinogen by IARC, NTP, ACGIH, OSHA, or the EU Dangerous Substances Directive.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing skin and respiratory disorders may be at increased risk from exposure.

ACUTE TOXICITY DATA: No specific data is available.

SECTION 12 • ECOLOGICAL INFORMATION

No adverse effects of this material on the environment are anticipated.

SECTION 13 • DISPOSAL CONSIDERATIONS

Dispose in accordance with all federal, state, and local regulations.

SECTION 14 • TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

HAZARD CLASS:	N/A
UNITED NATIONS NUMBER:	N/A
LABELS:	N/A
NORTH AMERICA NUMBER:	N/A
PLACARDS:	N/A
BILL OF LADING:	Product name

INTERNATIONAL

Not classified as dangerous goods under ADR (road), RID (train), IATA (air), or IMDG (ship).

SECTION 15 • ADDITIONAL REGULATORY INFORMATION

UNITED STATES FEDERAL REGULATIONS

SARA TITLE III:

HAZARD CATEGORY FOR SECTION 311/312: This product is a manufactured article and not subject to reporting.

SECTION 313 TOXIC CHEMICALS: This product contains the following chemicals subject to Annual Release Reporting Requirements under SARA Title III, Section 313 (40 CFR 372): None.

SECTION 302 EXTREMELY HAZARDOUS SUBSTANCES (TPQ): None.

US TOXIC SUBSTANES CONTROL ACT INVENTORY (TSCA): This product is an article and not subject to TSCA.

UNITED STATES STATE REGULATIONS

CALIFORNIA PROPOSITION 65: This product contains continuous filament fiber glass and ceramic fibers which is known to the State of California to cause cancer. This product may also contain trace amounts of formaldehyde which is known to the State of California to cause cancer.

INTERNATIONAL REGULATIONS

EU LABELING: Finished product is an article and no labelling is required.

EU CHEMICAL INVENTORY (EINECS)/REACH: This product is considered an article under EINECS and REACH.

RoHS (Restriction on the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations): This product is RoHS compliant.

AUSTRALIAN INVENTORY OF CHEMICAL SUBSTANCES: This product is an article and not subject to chemical notification requirements.

CHINA INVENTORY OF EXISTING CHEMICALS AND CHEMICAL SUBSTANCES: This product is an article and not subject to chemical notification requirements.

JAPANESE EXISTING AND NEW CHEMICAL SUBSTANCES: This product is an article and not subject to chemical notification requirements.

KOREAN EXISTING CHEMICALS LIST: This product is an article and not subject to chemical notification requirements

PHILIPPINE INVENTORY OF CHEMICALS AND CHEMICAL SUBSTANCES: This product is an article and not subject to chemical notification requirements.

CANADIAN CEPA NEW CHEMICAL NOTIFICATION: This product is an article and not subject to chemical notification requirements.

CANADIAN WHMIS: If dust is generated in processing, this dust would be classified as Class 2-D-A (eye, skin, and respiratory irritant, carcinogen).

NEW ZEALAND: This product is an article and not subject to chemical notification requirements.

SECTION 16 • OTHER APPLICABLE INFORMATION

EU CLASSES AND RISK PHRASES FOR REFERENCE (See Sections 2 and 3):

- Carc Cat 2 Carcinogen Category 2
- Carc Cat 3 Carcinogen Category 3
- Xi Irritant
- R38 Irritating to skin
- R40 Limited evidence of a carcinogenic effect
- R49 May cause cancer by inhalation

DEFINITIONS

29 CFR 1910.134 & 1926.103:
OSHA Respiratory Protection Standards

29 CFR 1910.1200 & 1926.59:
OSHA Hazard Communication

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	Carriage of Dangerous Goods by Road (International Regulation)
CAA	Clean Air Act
CAS	Chemical Abstract Services
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act
CFR	Code of Federal Regulations
DOT	Department of Transportation
DSL	Domestic Substances List (Canada)
EEC	European Economic Committee
EINECS	European Inventory of Existing Commercial Chemical Substances
EPA	Environmental Protection Agency
EU	European Union
HEPA	High Efficiency Particulate Air
HMIS	Hazardous Materials Information System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods Code
LC	Lethal Concentration
LD	Lethal Dose
NFPA	National Fire Protection Association
NIOSH	National Institute for Occupational Safety and Health
NTP	National Toxicology Program
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Limit
PIN	Product Identification Number
PNOC	Particulates Not Otherwise Classified
PNOR	Particulates Not Otherwise Regulated
RCRA	Resource Conservation and Recovery Act
RID	Carriage of Dangerous Goods by Rail (International Regulation)
SARA	Superfund Amendments and Reauthorization Act
STEL	Short Term Exposure Limit
TCLP	Toxic Chemical Leachate Program
TDG	Transportation of Dangerous Goods

TITLE III EMERGENCY PLANNING AND COMMUNITY RIGHT TO KNOW ACT – SECTION:

302	Extremely Hazardous Substances
303	Emergency Release
311	SDS/List of Chemicals

312	Emergency and Hazardous Inventory
313	Toxic Chemicals Release Reporting
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TWA	Time Weighted Average
WHMIS	Workplace Hazardous Materials Information System
µm	micrometer (micron)
mm	millimeter
cm	centimeter
m	meter
f/cc	fibers per cubic centimeter
ml	milliliter
in	inch
oz	ounce
lb	pound
µg	microgram
mg	milligram
g	gram
kg	kilogram
$\mu g/cm^2$	micrograms per centimeters squared
mg/m^3	milligrams per cubic meter of air
mppcf	million particles per cubic foot
ppm	parts per million
N/A	Not Applicable
ND	No Data/Not Determined
NE	Not Established
NR	Not Regulated

<<< End of SDS >>>