

MATERIAL SAFETY DATA SHEET

HEAT PACK

I. 24-HOUR EMERGENCY CONTACT INFORMATION

CHEM-TEL United States 800-255-3924
International 813-248-0585

II. HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

Component Identification	CASRN	OSHA PEL	ACGIH TLV	% (by weight)
ALKALINE MIX				
Calcium Oxide ⁽¹⁾	0001305-78-8	5 mg/m ³	2 mg/m ³	100
ACID MIX				
Sulfamic Acid	0005329-14-6	None Established		~ 50
Oxalic Acid	0000144-62-7	1 mg/m ³	1 mg/m ³	~ 50

⁽¹⁾ Calcium oxide may contain quartz (CASRN 0014808-60-7). The OSHA PEL for quartz is 30 mg/m³ / (%SiO₂ + 2) [total] and 10 mg/m³ / (SiO₂ + 2) [respirable]. The ACGIH TLV for quartz is 0.05 mg/m³.

III. PHYSICAL / CHEMICAL CHARACTERISTICS

Boiling Point Not Applicable
Melting Point Not Applicable
Vapor Pressure Not Applicable
Vapor Density (Air = 1) Not Applicable
Specific Gravity (Water = 1) Not Applicable
Evaporation Rate (butyl acetate = 1) Not Applicable
pH Corrosive
Appearance and Odor White solid, minimal odor
Odor Threshold Not Determined

IV. FIRE and EXPLOSION HAZARDS

Flash Point Not Applicable
Autoignition Temperature Not Applicable
LEL / UEL Not Applicable
Extinguishing Media Foam, Dry Chemical, CO₂
NFPA Ratings Health (3) – Flammability (0) – Reactivity (1)

Special Firefighting Procedures: Prevent exposure to fire, fumes, smoke, and products of combustion. Firefighters should wear full face, self-contained breathing apparatus. In contact with water, calcium oxide will hydrate evolving heat. Sufficient heat can be created during hydration to ignite combustible materials.

Fire and Explosion Hazards: Under fire conditions toxic fumes may be released.

V. REACTIVITY DATA

Stability Stable, unless mixed with water
Hazardous Polymerization Will not occur
Conditions to Avoid Unintentional addition of water or moisture to bag
Incompatibilities Oxidizing Materials
Hazardous Decomposition Products Oxides of nitrogen, sulfur, ammonia, amines

www.fgspipe.com

 **NOW** Fiber Glass Systems

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Fax: 501-568-4465

25 S. Main St.
Sand Springs, OK 74063
USA
Phone: 918-245-6651
Fax: 918-245-7566

VI. HEALTH HAZARD DATA

Route(s) of Entry: Inhalation..... Unlikely
 Skin..... Unlikely
 Ingestion..... Not Expected

The contents of this product are contained within a sealed bag that is not intended to be opened by the end user. However, there exists a small potential for exposure resulting from a ruptured bag. The potential health effects of such exposure are detailed below.

Acute (Short-Term) Health Effects: Upon direct contact may cause severe irritation, pain, and skin damage. Contact with eyes may cause similar discomfort and pain and even blindness. Inhalation may cause irritation, coughing, choking, headache, dizziness, breathing difficulty, and pulmonary edema. Inhalation effects may be delayed. Ingestion may cause severe burns, vomiting, diarrhea, and tissue perforation.

Chronic (Long-Term) Health Effects: Repeated or prolonged contact may cause effects similar to acute exposures with increased severity.

Carcinogenicity: The NTP (National Toxicology Program) classifies respirable quartz dusts as *known to be a human carcinogen*. IARC (International Agency for Research on Cancer) classifies refractory quartz as a Group 1 (*carcinogenic to humans*) carcinogen. OSHA does not classify any of this product's ingredients as carcinogens.

Signs and Symptoms of Exposure: Signs and symptoms following exposure to this product may include eye, skin, and respiratory irritation.

Medical Conditions Generally Aggravated by Exposure: Any preexisting eye, skin, or respiratory disorders may be exacerbated upon exposure.

Emergency and First Aid Procedures:

Inhalation: Immediately remove to fresh air. Seek medical attention if signs of overexposure are detected.

Skin Contact: Gently wash all affected skin areas thoroughly with water soap and water. If irritation persists or burning sensation is evident, seek medical attention.

Eye Contact: Flush eyes with water for at least 15 minutes. If irritation persists or burning sensation is evident, seek immediate medical attention.

Ingestion: Do not induce vomiting. Seek immediate medical attention.

HMIS Ratings Health (3) – Flammability (0) – Reactivity (1)

VII. PRECAUTIONS FOR SAFE HANDLING and USE

Steps to be Taken in Case Material is Released or Spill: Due to the packaging, physical attributes of the materials, and the relatively small end-use container sizes, significant spills are unlikely. However, if a spill does occur, do not allow spilled materials to enter storm sewers, sanitary sewers, or ground water. Place spilled materials in appropriate containers for disposal.

Waste Disposal Method: Disposal must be in accordance with applicable laws.

Precautions to be Taken in Handling and Storage: If packages rupture, do not allow contact with skin or eyes or inhalation of product dusts. Avoid water or moisture contamination of package contents.

VIII. CONTROL MEASURES

Respiratory Protection: None typically required for this product as intended for use.

Ventilation: None typically required for this product as intended for use .

Hand Protection: Gloves impervious to this material should be worn.

Eye Protection: ANSI-approved safety glasses with side shields or chemical goggles.

Other: Such clothing as to minimize or eliminate skin contact.

IX. REGULATORY INFORMATION (Not meant to be all-inclusive)

Hazardous Materials Transportation Act (HMTA)

This material should be classified as follows:

Proper Shipping Name Corrosive Solids, n.o.s., (Calcium Oxide, Sulfamic Acid)
 Hazard Class..... 8
 Identification Number UN1759
 Packaging Group III
 Label Required..... Corrosive

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

This produce contains the following CERCLA Section 102(a) hazardous substance(s) as listed in 40 CFR 302.4:

Identify	CASRN	% (by weight)	Reportable Quantity (RQ)
None			

Superfund Amendment and Reauthorization Act (SARA)

This product contains the following SARA Title III Section 302 extremely hazardous substance(s) as listed in 40 CFR Part 355:

Identify	CASRN	% (by weight)
None		

SARA Title III Section 311/312 hazardous categorization:

This product has been reviewed according to the EPA hazard categories promulgated under SARA Title III Section 311 and 312 and is considered to meet the following hazard categories:

- An immediate (acute) health hazard
- A delayed (chronic) hazard
- A reactive hazard

This product contains the following SARA Title III Section 313 toxic substance(s) as listed in 40 CFR Part 372:

Identify	CASRN	% (by weight)
None		

Toxic Substances Control Act (TSCA)

All ingredients are on the TSCA inventory or are not required to be on the inventory.

The information contained herein is believed to be accurate. However, we cannot assume any liability whatsoever for the accuracy or completeness of the information provided. Final determination of the suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.