

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	5mg/m ³	2 mg/m ³	100
ACID MIX				
Sulfamic Acid	0005329-14-6	None Established		~50
Oxalic Acid	0000144-62-7	1mg/m ³	1 mg/m ³	~50

⁽¹⁾Calcium oxide may contain (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.....Water, Foam, or Dry Chemical, or CO₂
 NFPA Ratings.....Health (1) – 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

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: None of the chemicals in this product are classified as known or potential human carcinogens by the National Toxicology Program (NTP), the International Agency for Research on Cancer (IARC), or OSHA.

Signs and Symptoms of Exposure: Signs and symptoms following exposure to this product will generally be related to the dusts generated when cutting or sanding and may include irritation (itching) of the skin, irritation to the eyes, and irritation to the respiratory tract.

Medical Conditions Generally Aggravated by Exposure: Existing skin or respiratory disorders may be aggravated upon dust exposure.

Emergency and First Aid Procedures:

Inhalation: No adverse effects anticipated

Skin Contact: Gently wash all affected skin areas thoroughly with water soap and water.

Ingestion: No adverse effects anticipated by this route of exposure incidental to proper handling

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

VII. PRECAUTIONS FOR SAFE HANDLING and USE

Steps to be Taken in Case Material is Released or Spill: Not applicable.

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

Precautions to be Taken in Handling and Storage: No specific precautions.

VIII. CONTROL MEASURES

Respiratory Protection: Such protection as to maintain employee exposures below prescribed limits.

Ventilation: A system of local and/or general exhaust is recommended when cutting or sanding.

Hand Protection: None specifically required.

Eye Protection: ANSI-approved safety glasses with side shields when cutting or sanding.

Other: None specifically recommended.

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

Hazardous Materials Transportation Act (HMTA)

This material should be classified as follows:

Proper Shipping Name.....Non-Regulated
 Hazard Class.....Not Applicable
 Identification Number.....Not Applicable
 Packaging Group.....Not Applicable
 Label Required.....Not Applicable

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:

Identity	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:

Identity	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 (when exposed to dusts)

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

Identity	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.

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