

# MATERIAL SAFETY DATA SHEET

RAMCO INSULATION, INC  
2021 ROOSEVELT, JOPLIN, MISSOURI 64804  
TELEPHONE 417-781-8855 FAX 417-781-9192

## SECTION I

PRODUCT NAME: 1-MWP, 1-GP/FF, 1-FW, MW, V-16, 1-V, 1-GP

FORMULA: NOT APPLICABLE

PRODUCT TYPE: THERMOKOTE CEMENTS

NFPA RATING: 1-0-0-0

CHEMICAL FAMILY: NOT APPLICABLE

DOT NO: NOT REGULATED

## SECTION II

### PRODUCT HAZARDOUS INGREDIENTS

MATERIAL	TLV-TWA	CAS=	PERCENT
Mineral Wool Fiber	10 mg. M total 5 mg. M respirable	65997-17-3	25-35
Bentonite Collodial Clay	10 mg. M total 5 mg. M respirable	1302-78-9	15-25
Ball Clay	10 mg. M total 5 mg. M respirable	1318-74-7	15-25
Portland Cement	10 mg. M total 5 mg. M respirable	65997-15-1	25-35
Muscovite	10 mg. M total 5 mg. M respirable	12001-26-2	10-20
Pyrophyllite	15 mg. M total 5 mg. M respirable	12269-78-2	5-15
Fly Ash	10 mg. M total 5 mg. M respirable	14808-60-7	5-15
Microfil	10 mg. M total 5 mg. M respirable	93763-70-3	5-10
Cellulose	Not listed	65996-61-4	5-10
Vermiculite	Not listed	1318-00-9	15-25
Rust Inhibitor (Trade Secret)	10 mg. M total 5 mg. M respirable	-----	<5

Note: International Agency for Research on Cancer (IARC) has classified crystalline silica in the category of Group 1  
**(DOES NOT CONTAIN ASBESTOS)**

## SECTION III

### HAZARDS INFORMATION

This product contains crystalline silica. Prolonged exposure to dust may cause silicosis, a progressive pneumoconiosis, or other respiratory diseases. International Agency for Research on Cancer (IARC) has classified crystalline silica as Group 1. The agency states there is sufficient evidence of carcinogenicity in humans. Reference: IARC Monograph 68.

Dust from product at any stage of its use or during tear-out after service may, especially on long term exposure, lead to lung disease unless respiratory protection is employed. NIOSH approved respirators should be worn any time that refractories are torn out after service. While a respiratory hazard and/or nuisance dust may exist from the product itself, other foreign substances may warrant additional precautions during tear-out and disposal.

SECTION IV  
FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Non-Combustible

EXTINGUISHING MEDIA: Material compatible with CO water or dry chemical extinguishing media.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

---

SECTION V  
FIRST AID AND HEALTH HAZARD DATA

EFFECT OF OVEREXPOSURE:

EYES: ACUTE: May cause irritation.

CHRONIC: None known.

SKIN: ACUTE: May cause skin irritation.

CHRONIC: None known.

INHALATION: ACUTE: May cause upper respiratory irritation.

CHRONIC: Prolonged irritation of mineral wool dust may reduce lung

function.

EFFECTS OF OVEREXPOSURE:

INGESTION: ACUTE: CONSULT A PHYSICIAN IMMEDIATELY.

EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately rinse eyes with plenty of water until irritation stops.

SKIN: Wash frequently with soap and water to minimize irritation.

INHALATION: Remove to fresh air. Remove fibers and dust from nose and drink water to clear throat.

INGESTION: Consult a physician immediately.

NOTE: Should any of the above conditions persist, consult a physician.

---

SECTION VI  
ACCIDENTAL RELEASE MEASURES

SPILLS: Avoid creating dust, use a vacuum or wet clean-up to minimize dust.

WASTE DISPOSAL: Mineral wool fiber products are generally classified as a non-hazardous waste and may be disposed of in a non-critical landfill. Always check all local, state and federal regulations.

---

SECTION VII  
HANDLING AND STORAGE

Store in dry area. Product is non-flammable.

---

SECTION VIII  
EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved respirators.

VENTILATION: Use sufficient ventilation (natural or mechanical) while handling this material in a dry state, to maintain airborne dust levels below TLV.

EYE PROTECTION: Safety glasses or goggles should be worn when materials are being handled.

GENERAL INFORMATION: Use waterproof or rubber gloves to protect hands. Clothing should be long sleeved, loose fitting and a cap should be worn. Wash all work clothing separate from other clothing to prevent possible migration of mineral wool fiber and dust to other clothes.

---

SECTION IX  
CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Dry, granular mixture, gray in color.

BOILING POINT: N/A

MELTING POINT: N/A

SOLUBILITY IN WATER: N/A

pH: 9.5 to 10.5

SECTION X  
STABILITY AND REACTIVITY

This product is stable under normal conditions of use, storage and transportation.

This product can react with strong acids.

---

SECTION XI  
TOXICOLOGICAL INFORMATION

LD or LC for oral, dermal or inhalation routes of administration. No data for product.

---

SECTION XII  
ECOLOGICAL INFORMATION

Ecotoxicological chemical fate information: Not available.

---

SECTION XIII  
DISPOSAL CONSIDERATIONS

As supplied, product may be disposed of in an approved landfill, in accordance with federal, state and local regulations.

Supplier can make no statement concerning disposal of used product, since product may become contaminated by hazardous materials during use.

---

SECTION XIV  
TRANSPORTATION INFORMATION

U.S.A. DOT: Not regulated.

Canadian TDG Hazard Class & PIN: Not regulated.

---

SECTION XV  
REGULATORY INFORMATION

TSCA Status: All components listed.

Canadian DSL: All components listed.

SARA Title III, Section 313: This MSDS provides the toxic chemical "SUPPLIER INFORMATION" required under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372. Toxic chemical information, if applicable to the product(s) named, is located in Section II - HAZARDOUS INGREDIENTS section of the MSDS. This information is subject to the toxic chemical reporting requirements of Section 313 and must be included in all MSDSs that are copied and distributed for this product.

---

Material Safety Data Sheet  
Product: Thermokote Cements

07/01/09  
3 of 3

Section XVI  
Other information

MSDS Status: Replaces MSDS dated 03/01/2004

Note: This material safety data sheet contains confidential proprietary information and is not to be disclosed to the general public or to competition except as required by law. This information accumulated herein is believed to be accurate but is not warranted to be whether originating with Ramco Insulation, Inc. or not. This information is offered solely for use in your evaluation of this product in respect to safety, health and environmental hazards.

MANUFACTURED BY:  
**RAMCO INSULATION, INC.**

P.O. Box 2173, JOPLIN, MO. 64803  
Office: 417-781-8855 FAX: 417-781-9192

SECTION IV

## FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Non-Combustible

EXTINGUISHING MEDIA: Material compatible with CO water or dry chemical extinguishing media.

SPECIAL FIRE FIGHTING PROCEDURES: None

UNUSUAL FIRE AND EXPLOSION HAZARDS: None

---

## SECTION V

### FIRST AID AND HEALTH HAZARD DATA

#### EFFECT OF OVEREXPOSURE:

EYES: ACUTE: May cause irritation.

CHRONIC: None known.

SKIN: ACUTE: May cause skin irritation.

CHRONIC: None known.

INHALATION: ACUTE: May cause upper respiratory irritation.

CHRONIC: Prolonged irritation of mineral wool dust may reduce lung

function.

#### EFFECTS OF OVEREXPOSURE:

INGESTION: ACUTE: CONSULT A PHYSICIAN IMMEDIATELY.

#### EMERGENCY AND FIRST AID PROCEDURES:

EYES: Immediately rinse eyes with plenty of water until irritation stops.

SKIN: Wash frequently with soap and water to minimize irritation.

INHALATION: Remove to fresh air. Remove fibers and dust from nose and drink water to clear throat.

INGESTION: Consult a physician immediately.

NOTE: Should any of the above conditions persist, consult a physician.

---

## SECTION VI

### ACCIDENTAL RELEASE MEASURES

SPILLS: Avoid creating dust, use a vacuum or wet clean-up to minimize dust.

WASTE DISPOSAL: Mineral wool fiber products are generally classified as a non-hazardous waste and may be disposed of in a non-critical landfill. Always check all local, state and federal regulations.

---

## SECTION VII

### HANDLING AND STORAGE

Store in dry area. Product is non-flammable.

---

## SECTION VIII

### EXPOSURE CONTROLS AND PERSONAL PROTECTION

RESPIRATORY PROTECTION: Wear NIOSH/MSHA approved respirators.

VENTILATION: Use sufficient ventilation (natural or mechanical) while handling this material in a dry state, to maintain airborne dust levels below TLV.

EYE PROTECTION: Safety glasses or goggles should be worn when materials are being handled.

GENERAL INFORMATION: Use waterproof or rubber gloves to protect hands. Clothing should be long sleeved, loose fitting and a cap should be worn. Wash all work clothing separate from other clothing to prevent possible migration of mineral wool fiber and dust to other clothes.

---

## SECTION IX

### CHEMICAL AND PHYSICAL PROPERTIES

APPEARANCE AND ODOR: Dry, granular mixture, gray in color.

BOILING POINT: N/A

MELTING POINT: N/A

SOLUBILITY IN WATER: N/A

pH: 9.5 to 10.5

## SECTION X

STABILITY AND REACTIVITY

This product is stable under normal conditions of use, storage and transportation.

This product can react with strong acids.

---

SECTION XI  
TOXICOLOGICAL INFORMATION

LD or LC for oral, dermal or inhalation routes of administration. No data for product.

---

SECTION XII  
ECOLOGICAL INFORMATION

Ecotoxicological chemical fate information: Not available.

---

SECTION XIII  
DISPOSAL CONSIDERATIONS

As supplied, product may be disposed of in an approved landfill, in accordance with federal, state and local regulations.

Supplier can make no statement concerning disposal of used product, since product may become contaminated by hazardous materials during use.

---

SECTION XIV  
TRANSPORTATION INFORMATION

U.S.A. DOT: Not regulated.

Canadian TDG Hazard Class & PIN: Not regulated.

---

SECTION XV  
REGULATORY INFORMATION

TSCA Status: All components listed.

Canadian DSL: All components listed.

SARA Title III, Section 313: This MSDS provides the toxic chemical "SUPPLIER INFORMATION" required under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR 372. Toxic chemical information, if applicable to the product(s) named, is located in Section II - HAZARDOUS INGREDIENTS section of the MSDS. This information is subject to the toxic chemical reporting requirements of Section 313 and must be included in all MSDSs that are copied and distributed for this product.

---

Material Safety Data Sheet

07/01/09

Product: Thermo kote Cements

3 of 3

Section XVI

Other information

MSDS Status: Replaces MSDS dated 03/01/2004

Note: This material safety data sheet contains confidential proprietary information and is not to be disclosed to the general public or to competition except as required by law. This information accumulated herein is believed to be accurate but is not warranted to be whether originating with Ramco Insulation, Inc. or not. This information is offered solely for use in your evaluation of this product in respect to safety, health and environmental hazards.

MANUFACTURED BY:

**RAMCO INSULATION, INC.**

P.O. Box 2173, JOPLIN, MO. 64803

Office: 417-781-8855 FAX: 417-781-9192

CURRENT MSDS DATE: 7/22/06