#### AMERICAN ROCKWOOL MANUFACTURING, LLC 1316 Village Creek Drive, Suite 600 Plano, Texas 75093

### **OSHA GHS SAFETY DATA SHEETS (SDS)**

#### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

| Product Generic Name: | Mineral Wool Insulation                                  |
|-----------------------|--|
| Product Use:          | Commercial, Industrial and Residential Insulation        |
| Products:             | Rockwool Premium Plus™, FireStop TB, HortiWool, CryoWool |

Manufacturers Name: American Rockwool Manufacturing, LLC 440 Jackrabbit Rd. Nolanville, TX 76559 Phone: (877) 247-5970 Fax: (972) 468-9086 Emergency Number: (214) 766-3527

### 2. HAZARD(S) IDENTIFICATION

APPEARANCE AND ODOR: Gray, green fibrous and earthy.

**EMERGENCY OVERVIEW:** Pungent smoke may be generated during fire. Exposure to dust may be irritating to the eyes, nose and throat.

#### POTENTIAL HEALTH EFFECTS:

ROUTES OF ENTRY: Skin, Eyes, Inhalation, Ingestion. TARGET ORGANS: Skin, Respiratory System. INHALATION: Inhalation of this material could cause irritation to the nose, throat, and respiratory tract. INGESTION: Not expected to be a normal route of entry. Ingestion of small amounts may produce gastrointestinal irritation. SKIN CONTACT: Dusts and fibers may cause temporary mechanical irritation. Symptoms include redness, and itching. EYE CONTACT: Dusts and fibers may cause temporary mechanical irritation. Symptoms include irritation, redness and pain. CHRONIC EXPOSURE: Repeated inhalation can produce varying degrees of respiratory irritation or lung damage. AGGRAVATION OF PRE-EXISTING CONDITIONS: Persons with pre-existing eye, skin and respiratory conditions may temporarily worsen due to exposure to dusts and fibers

#### **3. COMPOSITION/INFORMATION ON INGREDIENTS**

**Ingredient Name** Mineral Wool Mineral Oil **CAS Number** 65997-17-3 64742-65-0

% of Weight >99.5 <.5 CAS Number: 65997-17-3

#### 4. FIRST-AID MEASURES

**INHALATION FIRST AID:** If irritation occurs, remove the affected person to fresh air. Drink water, and blow nose, to clear dusts and fibers from throat and nose. If Irritation persists, consult aphysician.

**SKIN CONTACT FIRST AID:** If irritation occurs, do not rub or scratch. Rinse under running water prior to washing with mild soap and water. Use a washcloth to help remove fibers. If irritation persists, consult a physician.

**EYE CONTACT FIRST AID:** If contact with eyes, immediately flush eyes with plenty of water for at least 15 minutes lifting the upper and lower eyelids occasionally. Do not rub the eyes. Consult a physician if irritation persists.

**INGESTION FIRST AID:** Ingestion of this product is unlikely and not intended under normal conditions of use. If it does occur, rinse mouth with plenty of water to help remove dust and fibers, and drink plenty of water to help reduce potential gastrointestinal irritation. Do not induce vomiting unless direct to do so by a physician.

### **5. FIRE-FIGHTING MEASURES**

The products are non-combustible and do not pose a fire hazard. However, packaging material may burn.

SUITABLE EXTINGUISHING MEDIA: Water, foam, carbon dioxide or dry powder EXTINGUISHING MEDIA WHICH MUST NOT BE USED FOR SAFETY REASONS: None COMBUSTION PRODUCTS: Carbon dioxide, carbon monoxide and trace gases SPECIAL PROTECTION EQUIPMENT FOR FIREFIGHTERS: Observe normal firefighting procedures FLASH POINT: None FLASH POINT METHOD USED: Not Applicable UPPER FLAMMABLE LIMIT (UFL): Not Applicable LOWER FLAMMABLE LIMIT (LFL): Not Applicable AUTOIGNITION: Not Applicable EXPLOSIVE PROPERTIES: Not Applicable

## 6. ACCIDENTAL RELEASE MEASURES

**CONTAINMENT PROCEDURES:** Scoop up dusts and fibers after they have settled out of the air. These materials will disperse and settle along the bottom of waterways and ponds. It cannot easily be removed once it is waterborne, but is considered non-hazardous in water.

**CLEANUP PROCEDURES:** Use OSHA recommended work practices and protective equipment as described in Section 8 of this Safety Data Sheet. Avoid generating airborne dusts and fibers during cleanup. Do not use compressed air. Vacuum dusts and fibers. Place material in an appropriate container for disposal as non-hazardous.

**RESPONSE PROCEDURES:** Isolate area. Keep unnecessary personnel away. If dry methods or compressed air are used to collect dusts and fibers, all personnel in the area should wear OSHA-approved protective equipment (see section 8 of this Safety Data Sheet).

## 7. HANDLING AND STORAGE

**GENERAL PRECAUTIONS:** Utilize OSHA-recommended work practices and protective equipment when using the products (see section 8 of this Safety Data Sheet).

**HANDLING:** Open material at application site to avoid unnecessary handling of product. Keep work areas clean. Avoid unnecessary handling of scrap material and debris by placing such materials in suitable containers, which should be kept close to work area as possible. Ensure good ventilation. Local exhaust ventilation may be required if the method of use produces dust levels which exceed applicable exposure limits (see section 8 of this Material Safety Data Sheet). Avoid excessive eye and skin contact with dusts and fibers. Use recommended cleanup procedures to avoid buildup of dusts and fibers in the work area.

**STORAGE:** Keep material in original packaging until it is to be used. Store material to protect against adverse conditions including precipitation.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**GENERAL PRODUCT INFORMATION:** Follow all applicable exposure limits. Local regulations may apply. Texas Amerrock Partners, LP recommends that users of the products adhere to the OSHA-recommended PEL of 1 f/cc. (fibers longer than 5  $\mu$ m with diameters less than 3  $\mu$ m). This recommended PEL, together with recommended work practices and personal protective equipment, were adopted in a Health and Safety Partnership (HSPP) agreement in 1999 between OSHA and the North American Insulation Manufacturers Association (NAIMA). Adherence to the OSHA recommended PEL, work practices and protective equipment in the HSPP is expected to provide appropriate protection against all inhalation-related health risks that may be associated with exposures to mineral wool fibers ACGIH 1997; NAIMA 1999; OSHA 1999; National Research Council 2000, IARC 2001), and to minimize eye and skin irritation.

#### COMPONENT EXPOSURE LIMITS:

| Source | Legal or Recommended Exposure Limit   | Exposure  |
|--------|---|---|
| OSHA   | 1 f/cc TWA (recommended)  | Synthetic Vitreous Fibers, >5 $\mu$ m length, <3 $\mu$ m diameter   |
| ACHIH  | 1 f/cc TWA (threshold limit value - TLV)  | Synthetic Vitreous Fibers, >5 $\mu m$ length, <3 $\mu m$ diameter Synthetic Vitreous Fibers, >5 $\mu m$ length, <3 $\mu m$ diameter |
| OSHA   | 15mg/m <sup>3</sup> TWA-PFI (total particulate)<br>5mg/m <sup>3</sup> TWA-PFI (respirable particulate)      | Inert dust and particulates not otherwise regulated   |
| ACGIH  | 10mg/m <sup>3</sup> TWA-TLV (inhalable particulate)<br>3 mg/m <sup>3</sup> TWA-TLV (respirable particulate) | Particulates not otherwise classified, containing no asbestos and <1% crystalline silica  |

**EQUIPMENT AND WORK PRACTICES:** Follow OSHA-recommended equipment and work practices. A complete copy of these practices can be obtained from United States Fireproofing (see section 1. of this Safety Data Sheet), and is available on the OSHA website (<u>http://www.osha.gov/SLTC/syntheticmineralfibers</u>). Follow OSHA-recommended safe handling practices listed in Section 7 above. Where feasible, general dilution ventilation or local exhaust ventilation should be used as necessary to maintain exposures below applicable exposure limits. Dust collection systems should be used in machining operations and may be needed when using power tools. Follow OSHA-recommended work practices when spraying, installing or removing product.

### PERSONAL PROTECTIVE EQUIPMENT:

**GENERAL:** In poorly ventilated areas when dusty conditions exist and/or dust levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher. Use disposable face masks complying with NIOSH respirator standards, such as a 3M model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent. For exposure up to five times the established exposure limits use a quarter-mask respirator, rated N95 or higher; and for exposures up to 10 times the established exposure limits use a half-mask respirator (e.g. MSA's DM-11, Rascal's Delta N95, 3M's 8210), rated N95 or higher. For exposure up to 50 times the established exposure limits use a full-face respirator, rated N99 or higher.

**SPECIFIC OPERATIONS:** In poorly ventilated areas when dusty conditions exist and/or dusty levels exceed applicable exposure limits, wear a NIOSH certified dust respirator with an efficiency rating of N95 or higher, such as a 3M Model 8210 (or 8710) (3M Model 9900 in high humidity environments) or equivalent, when spraying, installing or removing product.

**SKIN:** Wear loose fitting, long sleeved and long-legged clothing to prevent irritation. A head cover is also recommended, especially when working with material overhead. The use of suitable gloves is also recommended. Skin irritation cannot occur if there is no contact with the skin. Do not tape sleeves or pants at wrists or ankles.

Remove fibers from work clothes, before leaving work to reduce potential skin irritation. If working in a very dusty environment it is advisable to shower and change clothes.

EYES/FACE: Wear safety goggles or safety glasses with side shields.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

| Physical State       | Solid                           | Vapor Pressure         | Not Applicable |
|----------------------|---------------------------------|------------------------|----------------|
| Appearance           | Gray, green fibrous             | Vapor Density          | Not Applicable |
| Odor                 | Earthy                          | Solubility in Water    | Soluble        |
| <b>Boiling Point</b> | Not Applicable                  | Partition Coefficient: | Not Applicable |
| Freezing Point       | Not Applicable                  | Specific Gravity       | Not Applicable |
| Melting Point        | Approximately 2150° F (1177° C) | Evaporation Rate       | Not Applicable |
| pH Range             | Not Applicable                  | Viscosity              | Not Applicable |
| Percent Volatile     | Not Applicable                  | VOC                    | Not Applicable |

### **10. STABILITY AND REACTIVITY**

STABILITY: Stable
REACTIVITY: Not reactive
HAZARDOUS POLYMERIZATION: Will not occur.
HAZARDOUS DECOMPOSITION: Oxides of carbon and smoke would be produced at high temperatures above 2150°F with thermal decomposition.
INCOMPATIBILITY WITH OTHER MATERIALS: This product reacts with hydrofluoric acid.

## **11. TOXICOLOGICAL INFORMATION**

**ACUTE TOXICITY:** Coarse fibers and dust from mineral wool products can cause temporary mechanical irritation (itching, redness) of the skin, and of the mucous membranes in the eyes and in the upper respiratory tract (nose and throat). The itching and possible inflammation are a mechanical reaction to dust and coarse fibers (of more than about 5 µm in diameter), and are not damaging in the way chemical irritants may be. They generally abate within a short time after the end of exposure. When products are handled continually, the skin itching generally diminishes.

**CHRONIC TOXICITY:** Inhalation: In October 2001, the International Agency for Research on Cancer (IARC) classified mineral wool fibers (rock or slag) as Group 3 (not classified as to carcinogenicity to humans).

### **12. ECOLOGICAL INFORMATION**

ENVIRONMENTAL TOXICITY: This product is not expected to have an adverse effect on the ecology.

### **13. DISPOSAL CONSIDERATIONS**

**WASTE DISPOSAL METHOD:** Dispose of material in accordance with federal, state and local requirements. Wastes are not hazardous as defined by the Resource Conservation and Recovery Act (RCRA;40 CFR 261).

WASTE NUMBERS: No EPA Waste Numbers are applicable for these products.

## **14. TRANSPORTATION INFORMATION**

U.S. DOT INFORMATION: Not a hazardous material per DOT shipping requirements. Not classified or regulated.

## **15. REGULATORY INFORMATION**

**TOXIC SUBSTANCES CONTROL ACT (TSCA):** All components in this product are listed, as required, on the U.S. EPA TSCA inventory, or are not required to be listed.

**CERCLA:** Includes mineral fiber emissions from facilities manufacturing or processing rock or slag fibers (orother mineral derived fibers) of average diameter 1 micrometer or less; Statutory RQ = 1 pound (.454 kg); no final RQ is being assigned to the generic or broad class (related to fine mineral fibers).

CLEAN AIR ACT: Mineral wool fiber appears on the Clean Air Act-1990 Hazardous Air Pollutants List.

**STATE AND LOCAL REGULATIONS:** State and local regulations not identified in this Material Safety Data Sheet may apply.

**WHMIS:** The products have been classified in accordance with the hazard criteria of the Controlled Product Regulations and this Material Safety Data Sheet contains all the information required by the Controlled Product Regulations.

WHMIS IDL: No components are listed on the IDL

WHMIS CLASSIFICATION: No components are classified as controlled products.

#### **16. OTHER INFORMATION**

|  | Health              | 0 |
|--|---------------------|---|
| Hazardous Material Information System (HMIS) | Flammability        | 0 |
|  | Reactivity          | 0 |
|  | Personal Protection | В |

National Fire Protection Association (NFPA) 0 - Health, 0 - Flammability, 0 - Reactivity.

NFPA/HMIS Definitions: 0 - Least, 1 - Slight, 2 - Moderate, 3 - High, 4 - Extreme. Protective Equipment: Safety glasses with side shield; proper gloves.

Information about "Health and Safety Research on Rock- and Slag- wool" can be obtained from the North American Insulation Manufacturers Association (NAIMA), 44 Canal Central Plaza, Suite 310, Alexandria, VA 22314. Home page: <u>http://www.naima.org</u>

Key/Legend: ACGIH - American Conference of Government Industrial Hygienists; CAA = Clean Air Act; CAS = Chemical Abstracts Service; CERCLA = Comprehensive Environmental Response, Compensation and Liability Act; DOT = Department of Transportation; EPA = Environmental Protection Agency; HMIS = Hazardous Material Identification System; HSPP = Health and Safety Partnership Program; IARC = International Agency for Research on Cancer; MSDS = Material Safety Data Sheet; NAIMA = North American Insulation Manufacturers Association; HFPA = National Fire Protection Association; NIOSH = National Institute for Occupational Safety and Health; OSHA = Occupational Safety and Health Administration; PEL = Permissible Exposure Limit; RCRA = Resource Conservation and Recovery Act; RQ = Reportable Quantity; SVP = Synthetic Vitreous Fibers; TLV = Threshold Limit Value; TSCA = Toxic Substances Control Act; TWA = time-weighted average; WHMIS = Workplace Hazardous Material Information System Prepared by: *Walt Smith* Date: April 8, 2013

Updated by: *David D. Martinez* Date: May 25, 2015

The data in this GHS Safety Data Sheet relates only to the specific material designated herein. It does not relate to use in combination with any other material. This GHS SDS has been reviewed to fully comply with the guidance contained in the Occupational Safety and Health Administration (OSHA) Hazzard Communication Standard 29 Code of Federal Regulations (CFR) 1910.1200 and American National Standards Institute (ANSI) Z400.1/Z129.1-2010 Hazardous Workplace Chemicals-Hazzard Evaluation and Safety Data Sheet and Precautionary Labeling Preparation Standard.

**END OF GHS SDS**