

Safe Use Instruction Sheet

This Safe Use Instruction Sheet (SUIS) is provided voluntarily for manufactured articles, which are neither regulated by OSHA Hazard Communication Standard, 29 CFR 1910.1200 nor the Canada Hazardous Products Regulation SOR/2015-17 [WHMIS 2015]. ROCKWOOL provides this SUIS to communicate safe handling and use instructions.

1. Identification

Product Name	Resin-bonded stone wool insulation
Synonyms	Mineral wool insulation, mineral fiber insulation, stone wool insulation
Manufacturer	ROCKWOOL
Addresses	8024 Esquesing Line Milton, ON L9T 6W3, Canada 4594 Cayce Rd Byhalia, MS 38611, USA
Phone Number	1-877-823-9790 (8:30am to 5:00pm ET)
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Company Website	www.rockwool.com/north-america/

Family	Product Identification	Recommended Use
I.	AFB® evo	Formaldehyde-free unfaced interior insulation batt
II.	AFB®, Comfortbatt®, Plus MB™, ROXUL Safe®, Safe'n'Sound®, Cavityrock®, Comfortboard®, Curtainrock®, Rockboard®, Frontrock™	Unfaced insulation batts and boards
III.	Cavityrock® Black, Curtainrock® RFF, Rockboard® RFF	Faced interior and exterior insulation boards
IV.	Monoboard®, Toprock® DD	Unfaced roofing insulation boards
V.	Toprock® DD Plus, Multifix™	Faced roofing insulation boards
VI.	Conrock®, Fabrock™, MSB 85	Unfaced batts and boards for OEM applications
VII.	ProRox® NA, SeaRox® NA	Unfaced industrial piping and equipment insulation

2. Hazards Identification

OSHA Regulatory Status

This product is considered an article as per OSHA 29 CFR 1910.1200. 29 CFR 1910.1200 (c) defines an article as follows: "Article" means a manufactured item other than a fluid or particle: (i) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent in whole or in part upon its shape or design during end use; and (iii) which under normal conditions of use does not release more than very small quantities, e.g., minute or trace amounts of a hazardous chemical (as determined under paragraph (d) abovementioned section), and does not pose a physical hazard or health risk to employees. Articles meeting the above definition are not regulated by OSHA 29 CFR 1910.1200 and are exempt from SDS and label requirements.

WHMIS Regulatory Status

This product is considered an article per the Canadian Hazardous Products Regulation SOR/2015-17. Manufactured articles that meet the definition of the Canadian Hazardous Products Act (any article that is formed to a specific shape or design during manufacture, the intended use of which when in that form is dependent in whole or in part on its shape or design, and that, when being installed, if the intended use of the article requires it to be installed, and under normal conditions of use, will not release or otherwise cause an individual to be exposed to a hazardous product) are not regulated by the Canadian Hazardous Products Regulation SOR/2015-17 and are exempt from SDS and label requirements.

Adverse Physiochemical, Human Health And Environmental Hazards

This product may cause temporary irritation to the eyes and skin, and to the upper respiratory tract (scratchy throat, coughing, congestion), resulting from exposure to dusts and fibers in excess of applicable exposure limits, or from release of binder components and binder decomposition products in high concentrations, when heated to approximately 150-200 °C for the first time. Pre-existing chronic eye, skin and respiratory conditions may temporarily worsen due to exposure. See section 8 for safe handling instructions.

3. Composition / Information On Ingredients

Family	Stone Wool, Biosoluble ^(a)	Non-Added Formaldehyde Binder	Phenol Formaldehyde Binder	Syrups, Hydrolysed Starch	Mineral Oil	Facer ^(b)
I.	98-99%	<2%	-	-	<1%	-
II.	96-99%	-	<3%	≤1%	<1%	-
III.	92-97%	-	<2%	<1%	<1%	<6%
IV.	94-96%	-	<5%	<1%	<1%	-
V.	87-95%	-	<4%	<1%	<1%	<8%
VI.	96-99%	-	<5%	<1%	<1%	-
VII.	97%	-	<3%	<1%	<1%	-



Ingredients are reported to 100ppm with the exception of some products in Product Family III, Product Family VII and VII where it is reported to 1000ppm. The composition is calculated as product percent by weight. Ranges are representative of the multiple products listed per family. For more information on individual products, refer to product specific Health Product Declarations (HPDs).

a: man-made vitreous (silicate) fibres of random orientation, with alkaline oxide and alkali earth oxide ($\text{Na}_2\text{O}+\text{K}_2\text{O}+\text{CaO}+\text{MgO}+\text{BaO}$) content greater than 18 % by weight and fulfilling CLP regulation Annex VI Note Q conditions.

b: Possible facer materials include minerally coated fibre glass mat, fiberglass reinforced aluminium foil with polyethylene film, asphalt / bitumen.

4. First-Aid Measures

Eye Contact	Do not rub or scratch eyes. Rinse immediately with water for at least 15 minutes.
Skin Contact (if itching occurs)	Remove contaminated clothing and wash skin gently with cold water and a mild soap. Never use compressed air to remove fibers from skin or clothing. If skin irritation persists, seek medical attention.
Inhalation	If affected, relocate to well ventilated area.
Ingestion	In the unlikely event of accidental ingestion, rinse mouth and drink water to clear fibers from the throat. If ingestion occurs, watch the person for several days to make sure intestinal blockage does not occur.

If any irritation or symptoms persists, seek medical attention.

5. Fire-Fighting Measures

Suitable Extinguishing Media	Water, foam, carbon dioxide or dry powder (no unsuitable extinguishing firefighting media known). Use extinguishing measures that are appropriate to the local circumstances and the surrounding environment.
Protective equipment for firefighters	Do not enter fire area without proper protective equipment, including NIOSH-approved self-contained breathing apparatus (SCBA). Observe normal fire-fighting procedures.

6. Accidental Release Measures

Personal precautions	Avoid contact with eyes and skin. In case of high concentrations of dust, ventilate and/or use the same protective equipment as mentioned in section 8. Relocate to well ventilated area.
Methods for cleaning up	Use personal protective equipment as required. Clean contaminated surface with vacuum, or sweep up after dampening with water spray. Place waste in appropriate containers for disposal.

7. Handling And Storage

Precautions and safe handling	Use the same protective equipment as mentioned in section 8. A serrated knife is preferred for cutting. Minimize dust creation and ensure adequate ventilation of workplace. Refer to section 10 for additional information on handling of
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products with facers, applicable to Product Family III and V, which may have known incompatible materials.

Storage conditions

The factory packaging is intended for the protection of ROCKWOOL stone wool insulation during shipment and for short term job site storage. It is not intended for protection against the elements during long term outside storage. For long term storage, ROCKWOOL strongly recommends that the product be stored indoors in a dry location, away from heat sources and incompatible materials if applicable, with the factory packaging removed. If the product is stored outdoors, the factory packaging should be perforated and the product should be protected by a waterproof membrane such as a tarp, that has been properly secured and allowing for ventilation. Product should not be stored in areas that flood, resulting in product storage in standing water. Product should be a minimum of 102 mm (4 inches) above dry ground and kept on a solid flat surface. Refer to section 10 for additional information on storage of products with facers, applicable to Product Family III and V, which may have known incompatible materials.

8. Exposure Controls / Personal Protection

Exposure guidelines

Follow all applicable exposure limits. Local regulations may apply. ROCKWOOL recommends that users of the products adhere to the OSHA-recommended PEL of 1 f/cc TWA (fibers longer than 5 µm with diameters less than 3 µm). This recommended PEL, together with recommended work practices and personal protective equipment, were adopted in a Health and Safety Partnership Program (HSPP) agreement in 1999 between OSHA and the North American Insulation Manufacturers Association (NAIMA), of which ROCKWOOL is a member. 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.

Reference	Exposure	Legal or Recommended Exposure Limit
OSHA	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter	1 f/cc TWA (recommended)
	Inert dust and particulates not otherwise regulated	15 mg/m ³ TWA-PEL (total particulate) 5 mg/m ³ TWA-PEL (respirable particulate)
ACGIH	Synthetic Vitreous Fibers, > 5 µm length, < 3 µm diameter	1 f/cc TWA (threshold limit value TLV)
	Inert dust and particulates not otherwise regulated	10 mg/m ³ TWA-PEL (inhalable particulate) 3 mg/m ³ TWA-PEL (respirable particulate)

Individual protection measures, including personal protection

Eyes / face: wear safety glasses with side shielding or similar.
 Skin / body: wear protective gloves, long sleeve shirt and long pants.
 Respiratory: Ensure proper ventilation, and use appropriate certified respirator when airborne particulates are above exposure limits; properly fitted NIOSH disposable N95 type dust respirator or better is recommended.
 General Hygiene: wash hands with cold water after handling products. Remove and wash clothes worn while working with product.



Engineering controls

Provide local exhaust and/or general ventilation to maintain exposure below regulatory and recommended limits. Dust collection system must be used in transferring operations, cutting or other dust generating processes, such as using power tools. Vacuum or wet cleaning methods are also recommended.

Power equipment

Equipment operator should wear adequate face and hand protection (gloves and face shields) at all times when cutting and/or processing ROCKWOOL stone wool products with the assistance of powered equipment, such as industrial saws. All powered equipment used to cut ROCKWOOL stone wool products should be installed with adequate guarding to protect the operator from the potential of flying debris, and well maintained. Any additional safety considerations provided by the power equipment manufacturer should be followed.

Information applicable to Product Family VII

Hot equipment operating at temperatures above 150 °C (302 °F) (run in period): during initial run-in, a thermal decomposition of organic matter can be observed starting around 150 - 200 °C, (302 °F - 392 °F) as a release of small amounts of potentially irritating and harmful fumes. This does not affect the quality or declared performances of installed products. The amount and composition of the fumes will depend on several variables including the amount of insulation installed, the service temperature, the temperature run in gradient, the ventilation rate or the jacketing materials. The run-in period can last from a few hours and up to several days. Ventilate the area well and keep a distance to the heated equipment. For high concentrations in enclosed spaces, use a supplied air respirator. For lower concentrations, an approved mask with particle filter type N95 or better is adequate. Selection of specific respirator type shall be made by a qualified person.

9. Physical And Chemical Properties

Physical state	Solid at 20 °C (68 °F)
Appearance	Fibrous
Color	Grey, green, brown, yellow
Odor	May have a slight odor of resin
Melting point	Approximately 1177 °C (2150 °F)
Water solubility	Insoluble in water
Facers	Appearance: smooth Color: black, white, metallic Meting point: not available

10. Stability And Reactivity

Reactivity and Chemical Stability

Chemically inert. Stable under normal conditions of use.

Hazardous Decomposition Products

The primary combustion products of the cured urea extended phenolic formaldehyde binder, when heated above 390 °F (200 °C), are carbon monoxide, carbon dioxide, ammonia, water and trace amounts of formaldehyde. Other undetermined compounds could be released in trace quantities. Emission usually only occurs during the first heating. The released gases may be irritating to the eyes, nose and throat during initial heat-up. Use appropriate respirators (air supplied) particularly in tightly confined or poorly ventilated areas during initial heat-up.

Incompatible materials

Products with facers, applicable to Product Family III and V may have known incompatible materials such as certain acids. Incompatible materials are materials which may react violently or explosively if mixed or brought together. These materials should be stored separately and should not be mixed unless special procedures are followed. Contact Technical Services if additional information is required.

11. Toxicological Information

Stone wool fibers are not classifiable as OSHA irritants, but coarse fibers and dust from mineral wool products can cause temporary and reversible irritation (itching, redness) of the skin and eyes. The itching and possible inflammation are a mechanical reaction to dust and coarse fibers (more than approximately 5 µm in diameter) and are not damaging in the way chemical irritants may be. The symptoms generally abate within a short time after the end of exposure. When products are handled continually, the skin itching generally diminishes. Their inhalation may also cause coughing, nose and throat irritation and sneezing. High exposures may cause difficult breathing, congestion and chest tightness.

Man-made vitreous wool fibers are IARC classified as Group 3 (not classifiable as to their carcinogenicity to humans).

12. Ecological Information

The products are not expected to cause harm to aquatic and/or terrestrial organisms, and have no known adverse environmental effects.

13. Disposal Considerations

The product, as supplied, is not expected to be a characteristic hazardous waste under the Resource Conservation and Recovery Act (RCRA) if discarded, and it is not expected to be hazardous for the environment. Dispose of waste material according to federal, state, provincial and local environmental regulations. Comply with relevant regulations with regards to disposal, recycling, treatment, transportation and storage of contents and containers.

14. Transport Information

This product is not subject to regulation as a hazardous material for transport.

15. Regulatory Information

International Inventories

As per section 2, this product is classified as an article. Articles are exempt from registration or listing chemicals inventories like TSCA (USA), DSL/NDL (CAN), REACH (EU), ENCS (JP), IECSC (CN), KECL (KR), PICCS (PH), AICS (AUS).

California Proposition 65

Product Family	Status
I.	This product does not contain any chemicals listed in Proposition 65
II., III., IV., V., VI., VII.	These products contain formaldehyde, a chemical known to the State of California to cause cancer, and birth defects or other reproductive harm.

16. Other Information

Date of Preparation

08/16/2018

Date of Revision

Refer to page 1 of 7

Revision Note

No information available

Disclaimer

The information contained herein is based upon data considered to be accurate. However, no warranty is expressed or implied regarding the accuracy of these data, the results to be obtained from the use thereof, or that any such use will not infringe upon any patent. This information is furnished as a guide only and upon the condition that the person receiving it shall make tests to determine the accuracy and suitability for his or her own purpose. No responsibility is assumed for injury or damage from the use of the products described herein.

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End of Safe Use Instruction Sheet