

Material Safety Data Sheet

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Product Identity

VR Plus Shield Multi-Layer Reflective Insulation

Description

Fi-Foil's VR Plus Shield™ is a triple-layer reflective insulation intended for use in vertical wall cavities formed by furring strips attached to the inside of masonry walls. VR Plus Shield™ is formed by an outer layer of 35 lb. white kraft paper coated with polyethylene, a layer of 30 lb. natural kraft paper laminated to a minimum 0.00025 inch, 99% pure aluminum foil, and a layer of minimum 0.00035 inch 99% pure aluminum foil. Upon installation of the layers open using internal expanders. The internal air space ranges between ¼ and ½ inches. The Thickness of the third air space is dependent on the thickness of the furring strips.

Section I – Manufacturer Information

Fi-Foil Company
612 Bridgers Avenue West
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(863) 965-1846 phone
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Section II – Hazardous Ingredients / Identity Information

Components:

Outer Foil – 99% pure aluminum 0.00035 to 0.0005 gauge, Temper 0, Alloy 1145

Film Coating – polyethylene film

Product is not hazardous as defined in 29 CFR1910.1200.

Paper – 35-pound kraft paper

Product is not hazardous as defined in 29 CFR1910.1200.

Expanders – 26-pound medium recycled paper

Product is not hazardous as defined in 29 CFR1910.1200.

Glue – Holt melt, PVA based adhesive

Product as shipped is not known or expected to be hazardous under criteria of the federal OSHA hazard communication standard 29 CFR 1910.1200.

Section III – Physical Data

Boiling Point – Not Applicable

Vapor Pressure – Not Applicable

Vapor Density – Not Applicable

Specific Gravity – Not Determined

Melting Point – Not Applicable

Evaporation Rate – Not Applicable

Solubility in Water – Not Soluble

Appearance and Odor – See Description

Section IV – Fire and Explosion Hazard Data

Flash Point – Not Applicable

Flammable Limits – Not Applicable

Extinguishing Media:

Water Fog, Foam, Carbon Dioxide or Dry Chemical

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus when fighting fires. Hot melt adhesive and polyethylene film becomes molten at elevated temperatures. Water stream applied directly to molten / burning material may cause spattering and spreading of fire.

Unusual Fire and Explosion Hazards:

Material will decompose during combustion or under pyrolysis conditions giving off toxic fumes irritable or harmful to the respiratory system. See Hazardous Combustion and Decomposition Products.

Section V – Reactivity Data

Stability

Stable under normal conditions.

Conditions to Avoid:

Avoid direct exposure of materials to open flames, electric arcs, heating elements, and other ignition sources that induce combustion and / or thermal decomposition.

Incompatibility (Materials to Avoid):

Strong Oxidizing Agents (such as fertilizer or household bleach)

Hazardous Polymerization:

Will Not Occur

Hazardous Combustion and Decomposition Products:

Carbon Monoxide, Carbon Dioxide, Acrid (choking) Smoke and Fumes, Vinyl Acetate, Acetic Acid, Various Hydrocarbons, other Unidentified Toxic Materials

Section VI – Health Hazard Data

Primary Routes of Entry:

Eye and skin contact with material in shipped form or in combustion.

Effects of Acute Overexposure:

For Each Potential Route of Exposure

Eye Contact:

Contact with Material in shipped form may cause mechanical irritation. Contact with combusting material may cause burns and irritations (tearing and redness).

Skin Contact:

Contact with Material in shipped form may cause mechanical irritation.

Contact with combusting material may cause burns.

Skin Absorption:

None known and by nature of product none expected.

Inhalation:

None is anticipated at ambient temperature. Vapor or fumes from combustion may cause nasal and respiratory irritation, excessive inhalation of vapors or fumes may cause labored breathing, cough, sore throat, headache, dizziness and unconsciousness.

Ingestion:

None known.

Emergency and First Aid Procedures:

Get immediate medical attention if any symptoms of overexposure occur.

If in Eyes:

If material is in shipped form, treat as a foreign object. Flush with water and if irritation or injury develops, see a physician. If materials in combustion or heated to elevated temperature, immediately flush (or immerse) eye with large amounts of cold, clean water to reduce temperature and relieve pain. Get medical attention immediately. Do not remove solidified material. Treat as a burn.

If on Skin:

If material is in combustion or heated to elevated temperature, immediately immerse contact area in cold, clean water or flush contact area with cold, running water to cool contact area and relieve pain. Get medical attention immediately. Do not attempt to remove solidified material from skin without medical assistance. Treat as a burn. For irritation from material in shipped form, wash affected area with soap and water. Treat for cuts and abrasions. See a physician for severe irritation.

If Breathed:

If affected by material in combustion, remove individual to fresh air. If breathing is difficult, administer oxygen. If breathing has

stopped, give artificial respiration. Keep person warm, quiet and get medical attention.

If Swallowed:

Get medical attention immediately.

Effects of Chronic Overexposure:

Material in shipped form has no known effects.

Medical conditions aggravated by exposure:

None known.

Section VII – Spill, Leak and Disposal Procedures

Released Material:

In shipped form, scoop up and place in container. If material is in combustion or has elevated temperature, remove persons not wearing protective equipment, extinguish fire, allow to cool, then pick up and place in container. Wear appropriate respiratory, eye, and skin protection as needed during cleanup.

Waste Disposal Method:

Dispose of material in accordance with applicable local, county, state, and federal regulations for a non-hazardous waste.

Section VIII – Special Protection Information

Respiratory Protection:

Not normally required.

Ventilation:

Not normally required.

Protective Gloves:

The use of impermeable gloves is advised to prevent skin irritation from edges and creases in material during installation, removal, or disposal.

Eye Protection:

Safety glasses or goggles are recommended to safeguard against potential eye contact, irritation, or injury during stapling or from solid material.

Other Protective Equipment:

Not normally required.

Section IX – Special Precautions and Other Comments

Storage and Handling Precautions:

Store in a cool, dry, ventilated area. Keep away from heat and open flame. Practice safe working conditions and good personal hygiene. Use protective equipment when necessary, wash thoroughly after handling and before eating, drinking, smoking, or using the toilet facilities. Product in combustion or exposed to elevated temperatures of 200 degrees or greater will cause product degradation.

Other Comments:

The responsibility to provide a safe work place remains with the user. The user should consider the health hazards and safety information contained herein as a guide. The users should take those precautions required in an individuals operation and application of the product. Instruct employees and develop work practice procedures for a safe work environment.

The information contained herein is, to the best of our knowledge and belief, accurate. However, because the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all federal, state, and local laws and regulations.