



COPPER LAMINATED FLASHINGS MATERIAL SAFETY DATA SHEETS

Section 1: General Information

Manufacturer's Name: Advanced Building Products
Address: 95 Cyro Drive, P.O. Box 98 Springvale, ME 04083
Telephone: 207-490-2306
Fax: 204-490-2998
Identity: 101, 102, 103, 107, 10920, 110, 114, 115, 116, 122, 14420, 150.
CDA Designation: C10100, C10200, C10300, C10400, C10920, C11000, C11400, C11500, C11600, C14420, C1500.

Section 2: Hazardous Ingredients

Chemical Name	CAS Registry No.	Percent by Weight
Copper	7440-50-8	99.8 Min.

Section 3: Physical Data

Melting Point	1976°-1981° F
Specific Gravity	8.89-8.94
Solubility in Water	Negligible

Section 4: Fire and Explosion Data

Flash Point (Method Used): Not applicable
Extinguishing Media: Dry Sand or Metal Extinguishing Powders
Special Fire Fighting Procedures: Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in fire.
Unusual Fire and Explosion Hazards: Do not use water on molten metals. Grinding or other machining operations can produce fine particulate dust, which may explode in the presence of a strong ignition source.

Section 5: Health Hazard Data

Threshold Limit Value: Copper: Fume-0.1 mg/m³; Dust & Mist-0.1 mg/m³.

Effects of Overdose: Mechanical irritation of skin and eyes. Irritation to stomach lining and intestines. Dry burning throat, headache, muscle aches, cough, chest tightness and pain, nausea, chills, fever, metallic taste.

Emergency and First Aid Procedures:

Skin: Flush thoroughly with water.

Eyes: Flush with water, call physician.

Ingestion: Induce vomiting in conscious person, call physician.

Inhalation: Remove victim to fresh air, call physician.

Section 6: Reactivity Data

Incompatibility (material to avoid): Hydrogen Peroxide, Acetylene, Chlorine, Halogenates of Barium, Calcium, Magnesium, potassium, Sodium and Zinc.

Hazardous Decomposition Products: At temperatures above the melting point metallic oxide fumes may be evolved.

Hazardous Polymerization: Will not occur.

Section 7: Spill of Leak Procedures

Steps to be taken in Case Material is Released or Spilled: A clean-up procedure, which minimizes exposure, is required. Vacuuming is preferred. Place material in closed containers. Do not use compressed air for cleaning. Use approved respiratory protection if possibility of dust, mist and/or fume exposure exists.

Waste Disposal Method: Copper-containing waste is normally collected to recover copper value. Should waste disposal be deemed necessary follow federal, State and Local regulations.

Section 8: Special Protective Information

Respiratory Protection: NIOSHA/MSHA approved respirator for toxic dust, fume and/or mist.

Ventilation: Exhaust dust, mist and/or fume at source if threshold limit values are exceeded.

Eye Protection: Safety glasses or face shield.

Section 9: Special Precautions

Precautions To Be Taken in Handling and Storing: Avoid inhalation and ingestion of dust, fume and/or mist. Practice good housekeeping and personal hygiene procedures.

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Date of revision: 12/11/96
Product Number: 0510801

Trade Name: AC-945 Asphalt Coating
Chemical Family: Asphalt

Section 1A: Regulatory Affairs Information

- ▶ The ingredients in this product are listed in the TSCA inventory as required by law.
- ▶ Ingredients present at a level that may be subject to reporting requirements of Sara title III section 313. Ingredients-None
- ▶ Ingredients present at a level, which could require reporting of release under cercla. Ingredients-None
- ▶ Ingredients present at a level that is subject to emergency planning requirements of threshold planning quantities (TPQ's) and release reporting based on reportable quantities (RQ's) in 40CFR355 (Used for Sara Title III Sections 302, 304, 311 and 312). Ingredients-None
- ▶ Ingredients listed in California Proposition 65 as causing cancer, birth defects or other reproductive harm. Ingredients-None
- ▶ Ingredients listed in Pennsylvania on the hazardous substance list. Ingredients-Asphalt, CAS Number: 8052-42-4

Section 2: Ingredients

Asphalt
Cas #: 8052-42-4 %: 50-90 TWA: 5 mg/m3 * Stel: N/E

Petrolatum
Cas #: 8009-03-8 %: 10-50 TWA: N/E Stel: N/E

** Hot asphalt fumes may contain trace amounts of hydrogen sulfide, which has a 10 PPM TWA and a 20 PPM Stel.*

Sara Title III Hazard Categories:

Health: Acute (Immediate) – Yes
Health: Chronic (Delayed) – Yes
Sudden Release of Pressure – No
Fire – No
Reactive – No
Not listed by IARC, NTP, OR OSHA

Section 3: Physical Data

Boiling Point: >600°F

Vapor Pressure: N/A

Vapor Density: Heavier than air.

Specific Gravity: 1.5 to 1.6

Percent Volatile: Nil

Evaporation Rate: N/A

Solubility in water: Negligible

Appearance and odor: Black solid; asphaltic odor

Section 4: Fire and Explosion Hazard Data

Flash Point: >550° F (C.O.C.)

Extinguishing Media: CO₂, Dry Chemical

Special Fire Fighting Procedures: Fire Fighters should wear self-contained breathing apparatus.

Unusual Fire and Explosion Hazards: At temperatures above the flash point, flammable and explosive vapors may evolve.

Section 5: Health Hazard Data

Primary routes of entry: Eye and skin contact, inhalation

Effect of Overexposure:

Eyes: Fumes from hot material may cause irritation. Contact with hot material causes thermal burns.

Skin: Contact with hot material causes thermal burns. Prolonged or repeated contact with cool material may cause irritation.

Inhalation: Vapors may cause irritation to respiratory tract.

Chronic Effects of Overexposure: Hydrogen Sulfide (H₂S), an irritant gas at 5PPM and above, is released by hot material in varying amounts. H₂S causes systematic toxicity and rapid death due to respiratory paralysis from exposures exceeding 500 PPM.

Medical conditions aggravated by exposure: Anemia. Impaired Pulmonary Function, Red Blood Cell abnormalities (all from H₂S exposure).

First Aid:

Eyes: Flush with clear water for 15 minutes. Get medical attention.

Skin: Wash area contacted by cold material with soap and water. If contact is with hot material submerge in cold water or ice. Do not try to remove asphalt. Cover with cold water or ice until advised by a physician. Get medical attention immediately.

Inhalation: If overcome, remove victim to fresh air. If breathing stops, begin artificial respiration. Get medical attention.

Section 6: Reactivity Data

Stability: Stable

Conditions to avoid: Water, near equipment and molten asphalt, will evolve steam, resulting in frothing and/or spattering; oxidizing materials.

Incompatibility: Strong Acid, Alkalies, Oxidizers, water.

Hazardous Decomposition Products: CO and/or CO₂

Hazardous Polymerization: Will not occur

Section 7: Spill and Leak Procedures

Steps to be taken if material is released or spilled: Remove all sources of ignition. Allow material to cool and collect with a suitable tool (heated if necessary) for proper disposal.

Waste disposal methods: Dispose in accordance with applicable local, state, and federal environmental regulations.

Section 8: Special Protection Information

Respiratory Protection: Organic vapor mask if TLV is exceeded or used in confined area.

Ventilation:

Local: adequate to keep exposure below TLV

Mechanical: Acceptable

Protective Gloves: Heat-Resistant Gloves

Eye Protection: Safety glasses or goggles with side shields.

Other Protective Equipment: Face shield (for splashing)

Section 9: Special Precautions

Avoid splashing and excessive heating. Do not take internally. For industrial use only. Keep out of reach of children.

Material Safety Data Sheet
Effective Date: January 4, 1995
Product Name: MICA

WHMIS Classification:
D-2A

Section 1: Material Identification

Manufacturer's Name: Advanced Building Products
Address: 95 Cyro Drive, P.O. Box 98 Springvale, ME 04083
Telephone: 207-490-2306
Fax: 204-490-2998

Chemical Name: Phlogopite Mica Trade Name: Suzorite Mica
Chemical Family: Silicate Formula: $K_2 (Mg, Fe)_6 Al_2 Si_6 O_{20} (OH,F)_4$

Section 2: Hazardous Ingredients/Identity Information

Components

Suzorite Mica (type-Phlogopite) is an inorganic mineral. It is an abundant silicate comprising many inorganic elements. It may contain trace amounts of crystalline silica (Quartz). Levels may vary between 0.1% to 1%.

OSHA PEL:

For Mica: (<1% crystalline silica) 20 mppcf (3mg/cu.meter)

ACGIH TLV:

For Mica: Total Dust 6mg/cu.meter, Respirable Dust 3 mg/cu.meter

The exposure limits of Mica are shown in Table Z-3-Mineral Dust, published by OSHA (29 CFR 1910.1000).

Mica:

Cas Registry No. 12001-26-2
OSHA: 29 CFR 1910.1000 Table Z-3
F.D.A.: 21 CFR 175 and 177
NIOSH: =VV867 0000

Crystalline Silica (Quartz) SiO₂:

CAS Registry No. 14808-60-7

Section 3: Physical Data

Decomposition Point: Approx. 1100°C (2012°F)
Vapor Pressure mm Hg: N/A
Solubility In Water: Insoluble

Specific Gravity (water=1): 2.9
Vapor Density: N/A
% Volatile by Volume: Non-Volatile

Steps to be taken in case material is released or spilled: Mica waste is not reactive, flammable or biodegradable. Use conventional means; e.g. sweeping, vacuum, etc. Use caution on wet floors, as it may be slippery.

Waste Disposal Method: Use normal solid waste disposal methods to comply with Federal and local laws.

Respiratory Protection (Specify Type): NIOSH approved dust respirator should be used when level exceeds TLV.

Ventilation: Normal air circulation, use adequate ventilation for low TLV.

Local Exhaust: Collect excessive dust at point of generation.

Protective Gloves: None Required

Eye Protection: Not mandatory, but advisable for allergic person.

Other Protective Equipment: None Required

Precautions to be taken in handling and storage: None

Other Precautions: None

Section 9: Additional Regulatory Concerns

Canadian WHIMS: D 2A

California Proposition 65: Mica is not on the list. However, Mica may contain ppm quantities of materials regulated under California's Safe Drinking Water and Toxic Enforcement Act of 1986.

Sara Title III: Mica is not required to report.

Section 302 NO

Section 304 NO

Section 311 & 312 NO

Section 313 NO

Cercla: 40 CFR Part 302, Table 302.4

Mica is not on the list.

RCRA: Mica is not classified as a hazardous waste under Section 3001 or RCRA, and under regulation 40 CFR Part 261.4 (b) (7).

EPA-TCLP: 40 CFR Part 261-24, appendix II – Table 1.

No noticeable amount of Toxic substances leaches out.

Heavy Metal "Coneg Model" Legislation:

Total amount of heavy metals in our mica-Lead, Cadmium, Mercury and hexavalent Chromium is much lower than 100-ppm; a maximum limit required by Coneg Legislation.

TSCA Chemical Substances Inventory: As a naturally occurring substance, mica is automatically included in the inventory under regulation 40 CFR 710.4 sub section b.

Canadian Domestic Substances List: On the list

Ontario 309 & Quebec-Classes 1 Annex III: Mica and its reject comply the regulations.

Mica is an inert product. No hazardous compound leaches during normal processing.

Conformance of Mica to FDA regulations:

Please note that mica meets the FDA criteria covering the safe use of mica in articles intended for food contact use. Mica is listed in the Code of Federal Regulations; Title 21 "Food and Drugs" parts 175 to 178 under "Indirect Food Additives":

175.105.5 Adhesives (Aluminum potassium silicate-mica)

175.300(b) (3) (xxvi)	Resinous and Polymeric Coatings (Aluminum and potassium silicate-mica)
177.1520 (b)	Olefin Polymers. The regulation says that food contact article may include substances that meet FDA prior approval.
177.2600. (C.4(v))	Rubber articles intended for repeated use. (Filler-mica)
178.3297	Colorants for Polymers

Section 10: Preparation Information

The information contained herein is based on data considered accurate. However, no warranty is expressed or implied regarding the accuracy of the data. The user must determine any use of this information and data. Our recommendations should not be taken as inducement to infringe any patent or violate any law, safety code, or insurance regulation. Advanced Building Products assumes no responsibility, obligation or liability therefore.

Explanation of Terms:

ACGIH	American Conference of Governmental Industrial Hygienists.
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act.
CFR	Code of Federal Regulations.
EPA	Environmental Protection Agency.
FDA	Food and Drug Administration
IARC	International Agency for Research on Cancer.
Mppcf	millions of particles per cubic foot of air.
NIOSH	U.S. National Institute for Occupational Safety and Health.
NTP	National Toxicity Program, Annual report of Carcinogens.
OSHA	U.S. Occupational Safety and Health Administration.
PEL	Permissible Exposure Limit.
RCRC	Resource Conservation and Recovery Act.
SARA	Superfund Amendments and Reauthorization Act.
TCLP	Toxicity Characteristics Leaching Procedure.
TSCA	Toxic Substances Control Act
TLV	Threshold Limit Value.
TWA	Time-Weighted Average
WHMIS	Workplace Hazardous Materials Information System

Material Safety Data Sheet

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Address: 95 Cyro Drive, P.O. Box 98 Springvale, ME 04083
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Fax: 204-490-2998

Chemical Family: Cellulose
Formula: Proprietary
Trade Name and Synonyms: 28231 Natural Crepe

Section 2: Hazardous Ingredients

Paints, Preservatives & Solvents	%	TLV (Units)	Alloys and Metallic Coatings	%	TLV (Units)
Pigments	N/A		Base Metal	N/A	
Catalyst	N/A		Alloys	N/A	
Vehicle	N/A		Metallic Coatings	N/A	
Solvents	N/A		Filler Metal Plus Coating	N/A	
Additives	N/A		Others	N/A	
Others	N/A				
Hazardous mixtures of other liquids, solids, or gases	N/A				

Section 3: Physical Data

Boiling Point	N/A	Specific Gravity	Approx. .5
Vapor Pressure	N/A	Percent volatile by volume (%)	N/A
Vapor Density	N/A	Evaporation Rate	N/A
Solubility in water	N/A		
Appearance & Odor	Brown Kraft Paper		

Section 4: Fire and Explosion Hazard Data

Flash Point: N/A *Flammable Limits:* N/A
Extinguishing Media: Water, dry chemical, carbon dioxide, class A extinguishers
Unusual Fire and Explosion Procedures: Work from up wind side and wear full protective clothing and self-contained breathing apparatus where breathing the products of combustion will occur.

Section 5: Health Hazard Data

Threshold Limit Value: N/A
Effects of Overexposure: N/A

Emergency and First Aid Procedures: Not made for human consumption. If swallowed, call a physician.

Section 6: Reactivity Data

Stability: Unstable

Hazardous Polymerization: Will not occur

Section 7: Spill or Leak Procedures

Steps to be taken in case material is released or spilled: N/A

Waste Disposal Method: Dispose of waster material in an approved landfill. Incineration is also acceptable providing all applicable environmental regulations are met and permits are valid.

Section 8: Special Protection Information

Respiratory Protection: N/A

Ventilation: N/A

Eye Protection: Glasses with side shields. (dust & trims)

Other Protective Equipment: Leather Gloves (paper cuts)

Section 9: Special Precautions

Other Precautions: Store in a dry location away from sources of sparks or other sources of ignition.

Material Safety Data Sheet

Section 1: Material Identification

Product Name: Resin Coated Fiber Glass Fabrics

Synonyms: PGM Types 205, 206, 207, 218, 221, 242, 243, 253, 256 Yellow Jacket, Glascoat.

Chemical Name: NA

CAS Number: NA Chemical Family: NA

Hazardous Class: Health:0 Fire:1 Reactivity: 0 Fourth:

Additional Comments: Caution! Glass Fibers may be irritating to the skin.

Section 2: Ingredients

<u>Ingredients</u>	<u>CAS No</u>	<u>%</u>	<u>OSHA PEL</u>	<u>ACGIH TLV</u>
Fibrous Glass (dust)	65997-17-13	Negl.	15mg/cuM	10mg/cuM 5mg/cuM - Respirable

Additional Comments: Amounts of dust will be dependent upon method of handling.

Section 3: Health Hazard Data

Entry Route Legend: A=Health Effect B=Personal Protection C=Emergency First Aid Procedures

- Inhale:** A: Mechanical Irritation
B: Not normally required. If required use NIOSH approved dust respirator.
C: Remove to fresh air. If breathing is difficult, give oxygen. If breathing has stopped, give artificial respiration. Get medical attention.
- Skin** A: Mechanical Irritation
B: Impervious gloves such as neoprene or vinyl.
C: Wash with soap and water or use waterless hand cleaner. Do not use solvents or thinners to clean skin.
- Ingest** A: Irritation
B: Do not ingest
C: If victim is conscious, give liquids. Call a physician. Do not induce vomiting unless directed to do so by a physician.
- Eyes** A: Mechanical Irritation
B: Safety glasses/goggles
C: Flush with large amount of water while holding eyelids open. Get medical attention if irritation persists.

Medical Conditions Aggravated by Exposure: Dermatitis, however, sensitivity varies from individual to individual.

Carcinogenicity: N/A

Additional Comments: Other Protective Equipment: Wear a protective apron if repeated contact is likely. Shower and clean work clothes daily is recommended.

Section 4: Fire and Explosion Data

Flash Point & Method: >300° F >149° C

Autoignition Temperature: N/A F C

Flammable Limits in Air: N/A

Extinguishing Media: Dry Chemical, Water Fog, Foam, CO₂

Firefighting Procedures: If entering a confined area, firefighters should wear a NIOSH approved self-contained breathing apparatus.

Other Precautions: The fiberglass will not burn. Numbers cited are for organic resin finish.

Section 5: Reactivity Data

Stability/Conditions to Avoid: Stable

Incompatibility/Materials to Avoid: Avoid contact with strong oxidizers.

Hazardous Polymerization/Conditions to Avoid: Will not occur

Hazardous By Products of Decomposition: Carbon monoxide, carbon dioxide, aldehydes, and other unidentified compounds may form upon combustion of the organic resin finish.

Section 6: Physical Chemical Data

Boiling Point: N/A

Specific Gravity (water=1): 1.2-1.3

Melting Point: >1100°C (glass)

Softening Point: >700°C (glass)

Evaporation Rate: ND

Vapor Density (Air=1): N/A

PH: N/A

Solubility: Insoluble in water.

Appearance and Odor: Woven Fabric, No discernible odor.

Additional Comments: Volatile Organic Contents 0%.

Section 7: Safe Usage Information

Handling, Storage & Other Precautions: Store and use in a manner that will prevent airborne particulate in the workplace.

Action to be taken in Case of Spill or Release (including disposal): Wastes should be disposed of according to federal, state & local regulations.

Section 8: Control Measures

Ventilation Requirements: Normal ventilation is usually adequate.

Work Hygiene Practices: See Section 3.

Section 9: Overview

Resin coated fiberglass fabrics will not rot, not easily tear nor wear. It is lightweight and will conform to irregular surfaces. There is no chemical hazard from this material. Too much glass fiber dust in the air will be irritating to the respiratory tract and eyes, but this is not likely to happen with this material. Glass fiber particles are irritating to the skin. Wear gloves. Shower and clean work clothes daily is recommended.

IMPORTANT NOTICE: The information contained in this Material Safety Data Sheet has been prepared in accordance with the OSHA Hazard Communication Standard, CFR1910.1200. This information relates specifically to the product designated and may not be valid for the product when used in combination with any other materials or products or in a particular process. The information is, to the best of our knowledge and

belief, accurate and reliable as of the date compiled. However, no representation, warranty, or guarantee is made as to its accuracy, reliability, or completeness. The user should review this information, satisfy itself as to its suitability and completeness, and pass on the information to its employees or customers in accordance with applicable federal, state or local hazard communications requirements. We do not accept responsibility for any loss or damage, which may occur from the use of this information.