



Material Safety Data Sheet

Product name: GelcopperUS

Material: copper pipe ASTM B280

Insulation: closed cells expanded polyethylene + low density polyethylene film

Product Codes of the insulation : polyolefin products

Chemical family: polyolefin thermoplastics

Manufacturer : PDM US Corp.
640 Cel River Road Rock Hill 29730
South Carolina
USA

Composition information on ingredients (Insulation)

Polyethylene	CAS 9002-88-4	85% - 100%
Other proprietary additives	N/A	0 - 15%

HAZARDOUS INGREDIENT		EXPOSURE LIMITS Wt %
Isobutane	CAS 0075-28-5	800 ppm TWA (ACGIH)

Hazards identification

Isobutane a flammable hydrocarbon gas is used as a blowing agent in Polyethylene Foam.

Trace amounts of this gas may remain in the product at the time of shipment.

**Potential health effects:**

Eye: Dust may cause irritation or eye injury due to mechanical action. Fumes/vapors emitted during hot-wire cutting may cause eye irritation.

Skin: Non-irritating to skin. Skin absorption is unlikely.

Inhalation: Dust may cause irritation to the nose, throat and lungs. Fumes/vapors generated during hot-wire cutting may cause respiratory irritation.

Concentrations of the isobutane agent incidental to proper handling of the product are expected to be well below the ACGIH recommended exposure limit of 800 ppm.

Ingestion: None determined.

Systemic Effects (Other target organs): None determined.

Carcinogenicity: NTP: Not listed.
IARC: Not listed.

OSHA:

Medical Conditions: Not regulated.

Aggravated by Exposure: None determined.

First aid Measures:

Eye: Flush eyes with clean, lukewarm water (low pressure) occasionally lifting eyelids.

Ingestion: Consult physician.

Skin: Wash with soap and water.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. Oxygen may be given by qualified personnel if breathing is difficult. Get medical attention.



Fire fighting measures

Flash Point: -1170F (Isobutane) Method Used: TOC

Flammability Limits: LFL 1.8% by volume, UFL 8.4% by volume (Isobutane)

Extinguishing Media: Water

Special Firefighting Procedures: Full emergency equipment with pressure demand self-contained breathing apparatus and full protective clothing should be worn by firefighters. During a fire, irritating and heavy toxic gases may be generated by thermal decomposition or combustion.

Accidental release measures

Spill or Leak Procedures: No special precautions are necessary. This product is a non-hazardous waste when spilled or disposed of, as defined in Resource Conservation and Recovery Act (RCRA) regulations (40 CFR 261).

Handling and storage

Special Precautions: Flammable vapors of isobutane may be generated during unventilated storage of large amounts of this product (for example, in storage trailers). To prevent the build-up of flammable vapors, do not store large quantities of this product in unventilated spaces including trailers. Ventilated trailers are recommended for transportation of bulk shipments of this product. To prevent potential fire or explosion, do not weld or apply intense heat to closed containers which contain this product. Open closed containers in a well ventilated area away from sparks or open flames. This product is combustible and should not be exposed to sparks or open flames. Large quantities of this product can burn rapidly and release toxic gases, including carbon monoxide. Fabrication methods involving cutting of large quantities of this product may release isobutane remaining in the foam cell structure. Provide adequate ventilation to ensure that isobutane concentrations remain below the ACGIH threshold limit value (TLV) of 800 ppm and the Lower Flammable Limit of 1.8% in air by volume to protect workers and eliminate the possibility of developing flammable or hazardous concentrations.



Exposure controls – Personal protection

Engineering Controls: Provide general and/or local exhaust ventilation to control airborne isobutane levels below ACGIH Threshold Limit Value (TLV) of 800PPM.

Eye Protection Requirements: Wear tight fitting safety goggles if there is a potential for exposure to flying particles.

Skin Protection Requirements: No special precautions.

Respiratory Protection Requirements: No protection is required if isobutane levels are maintained below the ACGIH TLV of 800 ppm. For exposures above the TLV, take into consideration the type of application, environmental concentrations and materials being used concurrently when selecting a respirator. Observe OSHA regulations for respirator use (29 CFR 1910.134).

Exposure Limits: Not established for products as a whole.

Physical and chemical properties

Physical Form: Flexible solid.

Odor: No Odor. Residual isobutane is colorless, with a gasoline-like or natural gas odor. Butane is reported to be detectable by odor at a range of 1262-5048 ppm (AIHA, 1989).

Vapor Pressure: Not applicable.

Vapor Density: Not applicable.

Boiling Point: Not applicable.

Solubility in water: Insoluble.

Density: 0 - 30 kg/m³.



Stability and reactivity

Stability: This is a stable material.

Incompatibilities: Strong oxidizing agents.

Decomposition Products: Carbon monoxide and other toxic gases are generated under combustion conditions.

Ecological information This product is inert to the environment and is not expected to exhibit any significant biodegradation.

Disposal considerations Waste may be reused, recycled or buried in an approved landfill. Follow all regulatory requirements for disposal.

REGULATORY INFORMATION

OSHA STATUS: This product is not hazardous under the criteria of the Federal OSHA Hazard Communication Standard 29 CFR 1910.1200. CERCLA RQ: None

SARA title III:

Section 302 Extremely Hazardous Substances: None.

Section 311/312 Hazard Categories: Non-hazardous.

Sections 313 Hazard Categories: None.

RCRA Status: If discarded in its purchased form, this product would not be a hazardous waste either by listing or by characteristic. However, under RCRA, it is the responsibility of the product user to determine at the time of disposal, whether the product should be classified as a hazardous waste (40 CFR 261.20-24).

National Fire Protection Association (NFPA) Ratings:
Health 0 Flammability 1 Reactivity 0

Canadian Regulations: This product is not a "Controlled Product" under WHMIS.



California Proposition 65: This product may contain small percentages of chemical(s) known to the state of California to cause cancer and/or birth defects. All potential hazardous chemicals with concentrations in the final product greater than 0.1% by weight are listed in Section 2.

OTHER INFORMATION

NOTICE: Each customer must determine whether the products discussed and the information contained in this document is appropriate for its use. NO WARRANTIES ARE GIVEN: ALL EXPRESS OR IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ARE EXPRESSLY EXCLUDED.

It is the Customer's responsibility to ensure that workplace and disposal practices are compliant with any applicable laws. Information provided as a result of testing and analysis by PDM US Corp is accurate as of the date shown below.

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