



MANSONVILLE PLASTICS (BC) LTD
MATERIAL SAFETY DATA SHEET



Section 1: Company Name & Product Identity

TRADE NAME (s): Korolite Reg, Korolite HD, Koroslope, Geofoam
USE: For insulation in the commercial, industrial, residential const. industry
MANUFACTURER: Mansonville Plastics (BC) Ltd
19402 - 56 Ave
Surrey, BC V3S6K4
1-800-663-8162 or 604 534-8626
CHEMICAL IDENTITY: Modified Expanded Polystyrene (EPS)
PHYSICAL APPEARANCE: Light weight rigid cellular plastic in sheets, slabs, shapes and block form. Also available as loose beads or granulated pieces
CHEMICAL FAMILY: Ethenylbenzene Homopolymer **FORMULA:** $C_8H_8)_n$
PRODUCT GRADES: Type 1 & 2 CAN/ULC-S701, Geofoam lightweight fill - Types EPS 12, EPS 19, EPS 22, EPS 24, EPS 29, EPS 39 ASTM D 6817

Section 2: Chemical Composition

Ingredients	Chemical Family Name	CAS No.	Formula	%WT
Polystyrene	Ethenylbenzene Homopolymer	9003-53-6	$(C_8H_8)_n$	98% - 99%
Flame retardent	Hexabromocyclododecane	3194-55-6	n/a	<1%
Pentane*	n-pentane	109-66-0	C_5H_{12}	<2%
Isopentane*		78-78-4		decrease with age

*this is a flammable blowing agent, see sec. 5 Fire and Explosion Hazard

Section 3: Health Hazard Identification

EYE CONTACT: Dust or particles from sanding or cutting may cause physical eye irritation.
Hot wire cutting may generate fumes which may cause irritation to eyes.
SKIN CONTACT: Normally there is no skin irritation. If the individual is super sensitive, they may produce a slight skin irritation.
Direct contact with a rough cut of foam can cause mechanical abrasion to exposed skin.
No long term effects
INHALATION: None identified when product is used in state of purchase.
Dust from fabrication may cause upper respiratory tract irritation.
Fumes from hot cutting wires may cause upper respiratory tract irritation
INGESTION: Biologically inert. Dust from sanding or cutting may cause mild irritation. If swalled, it may act as an obstruction
See sec 8 Personal Protection

Section 4: First Aid Measures

EYE CONTACT: Flush eyes with water or saline solution for a least 15 minutes, while holding eyelids open. Seek medical attention if irritation persists or worsens.
SKIN CONTACT: No long term effects from exposure. Mechanical injury may need medical attention. Wash exposed areas with mild soap and water. Consult physician if irritation persits.
INHALATION: Move to area to seek fresh air. If trouble for breathing persists, seek medical attention.
INGESTION: Product is not expected to present significant ingestion hazard, but if it does occur apply First Aid measures. Check for airway obstruction. Do not induce vomiting. Seek medical attention if obstruction occurs or acute pain occurs andis persistent.

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Section 5: Fire and Explosion Hazards

FLASH POINT: 345^oc OR 650^of (As opposed to paper 230C or 445F) per ASTM D-1929 for EPS
EXTINGUISHING MEDIA: Water fog, CO2 carbon dioxide, fire fighting foam, dry chemical (ABC type)
FIRE FIGHTING: Wear self-contained breathing apparatus respirator and approved personal protective clothing.
AUTO-IGNITION TEMPERATURE: 440^oc (824^o f) Min.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

If ignited, there may be dense black/grey smoke. The smoke may consist of carbon dioxide, styrene pentane, carbon monoxide, hydrogen halide, nuisance particulate. Pentane vapours may be emitted from freshly expanded or processed foam or when product is heated.

Hazardous concentrations of pentane may accumulate inside a sealed container or within confined spaced areas. The pentane level in molded blocks is approximately 2-3%. The molded blocks are stored for a period over 24 hours to reduce the pentane levels to less than 1% by weight. (0.18%) by volume. Electrostatic discharge can be a source of ignition of accumulated pentane vapours exceeding the lower explosion limit of 1.5% (15,000 ppm). See section 7 Storage & Handling

Section 6: Spill and Cleanup Procedures

SPILLS:

- Land:** sweep up material and place into suitable containers for recycling or disposal (this is considered as a non hazardous waste)
- Water:** EPS will float. Use fish net to scoop up. EPS will not leach into water.
- Air:** Because of its lightweight, winds will blow the particles around but will settle as air dies, sweep up and dispose accordingly.

WASTE DISPOSAL: Product is recyclable. Contact local community for drop off sites, or according to local ordinances.

Section 7: Storage and Handling

STORAGE REQUIREMENTS:

Although expanded polystyrene contains a fire retardant additive, it is still considered combustible. Store in a well ventilated area.

Rules for no Smoking, lighters, matches or welding around expanded polystyrene products should be strictly enforced.

Keep away from heat sources

When stored outside, they should be covered to prevent UV rays which will discolor the block (a pale yellow) and cause a fine powdery surface to the block.

Section 8: Transportation

Shipping: Expanded polystyrene products are NOT classified as dangerous goods for transport.

Hazard Class: None

Packaging Group: None

Combustibility Labelling: Caution: This product is combustible. A protective barrier or thermal barrier is required as required as specified in the appropriate building code.

Section 9: Personal Protection

EYE PROTECTION: Safety glasses/goggles recommended if using saw fabrication to protect eyes from dust particles.

Due to the sun reflections off the board stock workers may find wearing sunglasses easier on the eyes.

SKIN PROTECTION: To avoid skin irritation or mechanical abrasion, wear appropriate gloves and long sleeved shirts and long pants.

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GLOVES: None required.

RESPIRATORY PROTECTION: General control measures should be taken when cutting, sawing or heat cutting EPS by providing sufficient exhaust ventilation to maintain exposure below permissible exposure for combustion products from heated cutting tools.
If exhaust ventilation is not available when using heated cutting tools, use an approved NIOSH respirator.

Section 10: Ecological Impact

Biologically Inert.
Expanded polystyrene will not bring harm to ecosystems through its applied uses.

Section 11: Physical and Chemical Properties

APPEARANCE: Rigid blocks or boards
ODOR: Slight hydrocarbon odor
PHYSICAL STATE: Solid
COLOR: White
BOILING POINT: Not Applicable
MELTING POINT: Softening begins at 70 to 80 °C (160 °F - 176 °F)
VOLATILES BY VOLUME: <4
VAPOR DENSITY (Air=1) Not Applicable
EVAPORATION RATE: None
SOLUBILITY IN WATER Insoluble
SPECIFIC GRAVITY <1
DENSITY 10 TO 47 KG/M³ (0.6 TO 3 LBS/FT³)

Section 12: Stability and Reactivity

STABILITY: Stable, although avoid exposure to fire and high temperatures
INCOMPATIBILITY: EPS will react to Solvents and oxidizing agents
HAZARDOUS DECOMPOSITION: Gas/vapor oxides and aromatic hydrocarbons.
HAZARDOUS POLYMERIZATION: None

Section 13: Information Preparation

ISSUED: 01/01/92 **REVISED:** 04/01/2013 **PRODUCT SAFETY:** Phone (604)534-8626
REPLACES: 25/06/2012

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SUPPLIER: Mansonville Plastics (BC) Ltd, 19402 - 56 Ave., Surrey, British Columbia V3S 6K4