



LionGUARD

SDS Laminated EPS Products

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT: Laminated EPS series: LionGUARD™ CI

SUPPLIER: Polar Industries Inc.
32 Gramar Avenue
Prospect, CT 06410
USA

CONTACTS: For additional product and/or MSDS information, please contact your sales representative or customer service at 800.237.3763.

2. Ingredients, Components, Composition

- Ingredients Considered Hazardous to Health: This product conforms to the U.S. Occupational Safety and Health Administration (OSHA) Hazard Communication Standard's definition of an "Article," i.e., "... a manufactured item: (I) which is formed to a specific shape or design during manufacture; (ii) which has end use function(s) dependent ... upon its shape or design ...; and (iii) which does not release, or otherwise result in exposure to, a hazardous chemical, under normal conditions of use." [29 CFR 1910.1200 (b) (6) (iv)].

Polystyrene	CAS Reg: 9003-53-6	Approx wgt: > 93%
Pentane n-pentane	CAS Reg: 109-66-0	Approx wgt: < 2%
isopentane	CAS Reg: 78-78-4	Approx wgt: < 2%
Polyolefin	CAS Reg: 9003-07-0	Approx wgt. 1 - 3%
Polymeric FR	CAS Reg: 1195978-93-8	Approx wgt. < 1%
Graphite (GPS only)	CAS Reg: 7782-42-5	Approx wgt. < 6%

3. HAZARDS IDENTIFICATION

- U.S. OSHA HAZARD COMMUNICATION: Product assessed in accordance with OSHA requirements, per 29 CFR 1910.1200, and determined to be not hazardous.
- EFFECTS OF OVEREXPOSURE: No significant effects expected.
- EMERGENCY RESPONSE DATA: White/Grey foam plastic. Fire produces dense smoke, toxic fumes
- HMIS HAZARD IDENTIFICATION CODE: (Health: 0) (Flammability: 1) (Reactivity: 0)
- NFPA HAZARD IDENTIFICATION CODE: (Health: 0) (Flammability: 1) (Reactivity: 0)

4. FIRST AID MEASURES

- EYE CONTACT: Not expected to be a problem. Loosened particles or fibers may cause slight irritation, similar to airborne dust. Flush eyes with water.
- SKIN CONTACT: Not expected to be a problem. Rinse exposed skin with water, then wash with soap and water.
- INHALATION: Not expected to be a problem. If adverse effects occur, remove from exposure.
- INGESTION: Not expected to be a problem. No significant health hazards identified. Ingestion of large amounts may cause gastrointestinal distress requiring medical attention.



5. FIRE FIGHTING MEASURES

- **EXTINGUISHING MEDIA:** Agents approved for Class A hazards, including carbon dioxide, foam, dry chemical, water fog.
- **SPECIAL FIREFIGHTING PROCEDURES:** Water or foam may cause frothing. Use water to keep fire-exposed containers cool. Water spray may be used to flush spills away from exposure. Prevent runoff from fire control or dilution from entering streams, sewers, or drinking water supply.
- **FIREFIGHTING EQUIPMENT:** Positive pressure self-contained breathing apparatus.
- **UNUSUAL FIRE & EXPLOSION HAZARDS:** This material burns vigorously and emits dense, black, toxic smoke. Well-established fires are difficult to bring under control.
- **Flash Point:** 500° F. + (ASTM D 1929)
- **Autoignition Temperature:** 900° F. +
- **Flammable Limits:** LEL and UEL not determined
- **HAZARDOUS COMBUSTION PRODUCTS:** Carbon monoxide, carbon dioxide, possible hydrocarbon fragments, monomers, acrolein, halogens, acids, ketones, aldehydes

6. ACCIDENTAL RELEASE MEASURES

- **NOTIFICATION PROCEDURES:** Not expected to be a problem.
- **RELEASE / SPILL PROCEDURES:** Pick-up loose sheets and dispose of as normal refuse.
- **ENVIRONMENTAL PRECAUTIONS:** Normal good environmental housekeeping, i.e., shield material from wind, / drains, and prevent disposal in local soil.
- **PERSONAL PRECAUTIONS:** See Section 8.

7. HANDLING AND STORAGE

- **HANDLING:** No special precautions are necessary beyond normal good hygiene and workplace safety practices. Provide adequate ventilation.
- **STORAGE:** Store away from heat, ignition sources, open flame, combustible materials, strong oxidizers.
- **PRECAUTIONS:** Keep away from sources of ignition, e.g.: heat and open flame.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

- **VENTILATION:** No special equipment required. Use in adequately ventilated area.
- **RESPIRATORY PROTECTION:** No special equipment required under ordinary conditions of use and with adequate ventilation.
- **EYE PROTECTION:** No special equipment required. However, use of eye protection is good practice.
- **SKIN PROTECTION:** No special equipment required. However, use of protective gloves/ clothing is good practice.
- **EXPOSURE LIMITS:** No recognized exposure limits established for components of this product



9. TYPICAL PHYSICAL AND CHEMICAL PROPERTIES

- APPEARANCE: White or Grey polystyrene sheet.
- AUTOIGNITION TEMP.: 900°F
- COLOR: White, Grey
- FLAMMABILITY: Not Classified FLASH POINT: 500°F. +
- FREEZING POINT: Not Established MELTING POINT: 200°F. +
- ODOR: Slightly sweet, slight plastic odor
- SOLUBILITY IN WATER: Negligible
- SPECIFIC GRAVITY: 0.07 (Water = 1.0)

10. STABILITY AND REACTIVITY

- STABILITY (THERMAL, LIGHT, ETC.): Stable
- CONDITIONS TO AVOID: Extreme heat and ignition sources, e.g.: sparks, open flames
- INCOMPATIBILITY: Strong oxidizers; aromatic and chlorinated hydrocarbons.
- HAZARDOUS DECOMPOSITION: Incomplete combustion can produce acids, acrolein, aldehydes, carbon monoxide, halogens, ketones, monomers, possible hydrocarbons.
- HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL DATA (Based on tests of similar products and/or the components, literature, experience)

- ORAL TOXICITY (Rat): Practically non-toxic (LD50: > 2000 mg/kg)
- DERMAL TOXICITY (Rabbit): Practically non-toxic (LD50: > 2000 mg/kg)
- INHALATION TOXICITY (Rat): Practically non-toxic (LC50: > 5 mg/ L)
- EYE IRRITATION: Nonirritating
- SKIN IRRITATION: Non-irritating
- CARCINOGENIC COMPONENTS: None at 0.1% + concentration identified by IARC, NTP, OSHA;

12. ECOLOGICAL INFORMATION

- ENVIRONMENTAL FATE Ecological testing of this product has not been conducted.
- Components of this product AND EFFECTS: yellowing and surface degradation under lengthy exposures to UV light. Their proper incineration in state- of-the art incinerators equipped with after-burners yields carbon dioxide and water. Polymer materials may not decompose in modern sanitary landfills. Component materials may be recycled where adequate collection infrastructure and appropriate recycling facilities exist.

13. DISPOSAL CONSIDERATIONS (Based on evaluations of similar products and/or the components)



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- WASTE DISPOSAL: Dispose of waste as normal refuse, in accordance with local regulations.
- RCRA INFORMATION: The unused product is not, in our opinion, specifically listed by U.S. EPA as a hazardous waste [40 CFR 261D]. It is not formulated to contain materials which are listed hazardous wastes. It does not exhibit the hazardous characteristics of ignitability, corrosivity, or reactivity, and it is not formulated with contaminants as determined by the Toxicity Characteristic Leaching Procedure. Used product may be regulated, however.

14. TRANSPORT INFORMATION

- U.S. DEPARTMENT OF TRANSPORTATION: Not Regulated
- CANADIAN TRANSPORT OF DANGEROUS GOODS: Not Determined

15. REGULATORY INFORMATION

- CERCLA 102A / 103: Product is not a Reportable Hazardous Substance under 40 CFR 302.4.
- OSHA: Product is unregulated "Article" under OSHA HazCom 29 CFR 1910.1200 (b)(6)(iv).
- TSCA: All components comply with U.S. Toxic Substances Control Act requirements.
- SARA III, Sec. 302: Product is not an "Extremely Hazardous Substance" under 40 CFR 355.
- SARA III, Sec. 311/312: No Reportable Hazard Categories under 40 CFR 370.
- SARA III, Sec. 313: Components not reportable under Toxic Release program, per 40 CFR 372.
- Not listed under California Proposition 65.

16. OTHER INFORMATION

CHEMICAL NAMES: Foamed Polystyrene

INTENDED USE: Residential / Commercial Building Insulation Material

INGREDIENTS: Major Components:

Polystyrene, CAS No. 09003-53-6

Polyolefin, CAS No. 9003-07-0

Trace Residuals:

Pentane, CAS No. 109-66-0

Isopentane, CAS No. 78-78-4

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Caution: Appropriate warnings and safe handling procedures should be provided to users. Like many construction materials this product is combustible. It should not be exposed to flame or other ignition sources.

It is the buyer's responsibility to see that the product is installed in accordance with applicable building codes. Local codes may require a protective or thermal barrier. Meets IBC/IRC requirements for foam plastic insulation. Refer to section 2603 of IBC for details. See product listings: NER-479, ESR-1798, ESR-1640, ESR-1095 and ESR-1634 Meets ASTM C-578 and HUD Specifications.

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