

SAFETY DATA SHEET ›

LUMIFORM™**1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING**

Trade Name	Lumiform™ (resin)
Other Name(s)	PETG
Usage	Plastic sheet products
Supplier	Lumicor, Inc. 1400 Monster Road SW, Renton, WA 98057 Telephone: 425.255.4000 www.lumicor.com

2. HAZARDS IDENTIFICATION

This material is classified as not hazardous under OSHA regulations. Under normal conditions of use, this product is not expected to create any unusual industrial hazards. Irritating gases/fumes may be given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Characterization	100% PETG Copolyester [Proprietary]
---------------------------	-------------------------------------

4. FIRST-AID MEASURES

Inhalation	Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.
Skin Contact	Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burn occurs.
Eye Contact	In case of contact, flush eyes with plenty of lukewarm water.
Ingestion	Get medical attention.

5. FIRE FIGHTING MEASURES

Suitable Extinguishing Media	Dry water fog, dry chemical, carbon dioxide (CO ₂)
Specific Fire Hazards	Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.
Special Protective Equipment & Precaution for Fire Fighters	Wear a self-contained breathing apparatus and chemical protective clothing.

6. ACCIDENTAL RELEASE MEASURES

Personal Precaution	If molten, allow material to cool and place into an appropriate marked container for disposal. Do not breathe vapors or dust.
Environmental Precaution	Do not release into the environment, such as into drains.
Methods for Cleaning Up	Sweep up and shovel into suitable containers for disposal.

7. HANDLING AND STORAGE

Max. Storage Temperature	120°F (49°C)
Handling	Handle in accordance with good industrial hygiene and safety practices. Wash thoroughly after handling. Avoid creating dust.
Storage	Containers should be tightly closed to prevent contamination with foreign materials and moisture. Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Limits	Not applicable
Ventilation Measures	Provide good ventilation and/or an exhaust system in the work area.
Respiratory Protection	In the case of dust, use respirator with an approved filter.
Hand Protection	Wear heat resistant gloves when handling molten material.
Eye Protection	Safety glasses with side shields.
Skin & Body Protection	No special skin protection requirements during normal handling and use.
Other Protective Measures	Wash hands before breaks and after work. Educate and train employees in the safe use and handling of this product. Purgings should be collected as small flat thin shapes or thin strands to allow for rapid cooling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid sheets
Color	Transparent
Odor	Odorless
pH	Not applicable
Melting Point	Not available
Boiling Point	Not available
Decomposition Temperature	716°F (380°C) approx.
Flash Point	> 842°F (> 450°C)
Auto-ignition Temperature	880°F (471°C)
Explosion Limits	Not available
Evaporation Rate	Not applicable
Vapor Pressure	Not applicable
Vapor Density	Not applicable
Relative Density	1.27
Solubility	Insoluble

10. STABILITY AND REACTIVITY

Stability	Stable. Hazardous polymerization does not occur.
Conditions to Avoid	Protect from excessive heat. Keep away from sources of ignition and heat. Avoid dust formation.
Materials to Avoid	None under normal conditions of use.
Hazardous Decomposition Products	Thermal decomposition or combustion may emit vapors, carbon monoxide, or carbon dioxide.

11. TOXICOLOGICAL INFORMATION

This product should not be harmful under normal conditions of use.

Inhalation	Unlikely to be harmful by inhalation under ambient temperature. At high temperature, products of thermal decomposition can be irritating to the respiratory system.
Skin Contact	Not a skin sensitizer, and is non-irritating to skin under ambient temperature. At high temperature, contact with the product can cause serious burns.
Ingestion	Unlikely to be harmful by ingestion under ambient temperature.
Eye Contact	This product in the form of dust can be irritating to the eyes. At high temperature, products of thermal decomposition can be irritating to the eyes.

Carcinogenity	Non-carcinogenic
Toxicity Data	Acute oral toxicity LD50 = > 3,200 mg/kg Acute oral toxicity LD50 = > 3,200 mg/kg Acute dermal toxicity LD50 = > 1,000 mg/kg Skin irritation = slightly irritating Eye irritation = slightly irritating Eye irritation = non-irritating

12. ECOLOGICAL INFORMATION

This product is a solid, inert product with low volatility, and is essentially insoluble in water.

Ecotoxicity	This product should have low toxicity to aquatic and terrestrial organisms.
Mobility	Due to the solid nature of this product, it should have low mobility in soil.
Persistence & Degradability	This product is non-biodegradable.
Bioaccumulation	This solid product has a low potential for bioaccumulation.
Effect in Sewage Plants	May be separated mechanically.
Ecological Data	Fish toxicity LC50/96-hr = > 100 mg/l (pimephales promelas) Aquatic invertebrates toxicity LC50/96-hr = > 100 mg/l (daphnia magna)

13. DISPOSAL CONSIDERATIONS

Waste disposal should be in accordance with all federal, state and local environmental laws and regulations.

14. TRANSPORT INFORMATION

Not subject to national and international regulations on the transport of dangerous goods.

15. REGULATORY INFORMATION

OSHA Hazard Communication	Non-hazardous
Toxic Substances Control Act	Listed
CERCLA Hazardous Substances (40 CFR 302)	None
SARA Section 311/312	Non-hazardous
SARA Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A)	None
SARA Section 313 Toxic Chemicals (40 CFR 372.65)	None
RCRA Hazardous Wastes (40 CFR 261)	When this product becomes a waste, it is identified as a solid but NOT hazardous waste under RCRA criteria (40 CFR Part 261).
Canadian WHMIS	None

16. OTHER INFORMATION

HMIS Rating Health = 1 Flammability = 1 Physical Hazard = 0

The information presented herein is believed to be factual and reliable. It is offered in good faith, but without guarantee, since conditions and methods for the use of our products are beyond our control. We recommend that the prospective user determine the suitability of our products and these suggestions before adopting them on a commercial scale.