



LUMISHIFI D FX™

1. Product and Company Identification

Product Name: Lumishield EX Material Number: i37309

Synonym(s): Polycarbonate (PC)

Chemical Family: Thermoplastic Polymer Sheet

2. Hazards Identification

> Emergency Overview

CAUTION

Color: Natural | Form: Solid Sheets | Oder: Odorless

Melted product is flammable and produces heat and dense smoke during burning. Irritating gases/fumes may be given off during burning or thermal decomposition. Contact with hot material will cause thermal burns.

> Potential Health Effects

Primary Routes of Entry: Inhalation, Skin Contact, Eye Contact Medical Conditions Aggravated by Exposure: Respiratory Disorders

> Human Effects and Symptoms of Overexposure

SKIN

Acute Skin, for product: Lumishield EX, Smooth/Smooth Contact with heated material can cause thermal burns.

INGESTION

Acute Ingestion, for product: Lumishield EX, Smooth/Smooth Ingestion is not a typical route of industrial exposure

GENERAL EFFECTS OF EXPOSURE

Acute Effects of Exposure, for product: Lumishield EX, Smooth/Smooth Gases and fumes evolved during the thermal processing or decomposition of this material may irritate the eyes, skin or respiratory tract.

Chronic Effects of Exposure, for product: Lumishield EX, Smooth/Smooth Not expected to cause any adverse chronic health effects.

CARCINOGENICITY

No Carcinogenic substances as defined by IARC, NTP and/or OSHA

3. Composition/Information on Ingredients

> Hazardous Components

This material is not hazardous under the criteria of the Federal OSHA Hazard communication Standard 29 CFR 1910.1200.



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4. First Aid Measures

EYE CONTACT

In case of contact, flush eyes with plenty of lukewarm water.

SKIN CONTACT

Cool melted product on skin with plenty of water. Do not remove solidified product. Get medical attention if thermal burn occurs.

INHALATION

Move to fresh air in case of accidental inhalation of dust or fumes from overheating or combustion.

INGESTION

Get medical attention.

5. Firefighting Measures

Suitable extinguishing media: Water fog, dry chemical, Carbon dioxide (C02)

Special Fire Fighting Procedures: Firefighters should be equipped with self-contained breathing apparatus to protect against potentially toxic and irritating fumes.

Unusual Fire/Explosion Hazards: Toxic and irritating gases/fumes may be given off during burning or thermal decomposition.

6. Accidental Release Measures

Spill and Leak Procedures: If molten, allow material to cool and place into an appropriate marked container for disposal. Sweep up and shovel into suitable containers for disposal.

7. Handling and Storage

Storage Temperature: Maximum: 49°C (120.2°F)

Storage Period: Containers should be tightly closed to prevent contamination with foreign materials and moisture.

Handling/Storage Precautions: Protect equipment (e.g. storage bins, conveyors, dust collectors) with explosion vents.

8. Exposure Controls/Personal Protection

Country specific exposure limits have not been established or are not applicable.

Industrial Hygiene/Ventilation Measures: General dilution and local exhaust as necessary to control airborne vapors, mists, dusts and thermal decomposition products below appropriate airborne concentration standards/guidelines, especially during cutting, grinding and high heat operations.

For more information, visit <u>www.lumicor.com</u> or call 1.888.LUMICOR 5/14/2013 | MSDS-Lumishield EX | © 2013 Lumicor, Inc. All rights reserved.





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Respiratory protection In the case of dust or aerosol formation use respirator with an approved filter.

Hand protection Wear heat resistant gloves when handling molten material.

Eye protection Safety glasses with side-shields

Skin and body protection No special skin protection requirements during normal handling and use.

Additional Protective Measures

Employees should wash their hands and face before eating, drinking, or using tobacco products. 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

Form: solid

Appearance: sheets Color: Natural Odor: odorless pH: not applicable

Flash point: > 450 °C (> 842 °F)

Lower explosion limit: Not Established Upper explosion limit: Not Established Vapour pressure: not applicable Solubility in Water: Insoluble

Autoignition temperature: > 450 °C (> 842 °F)

Decomposition temperature: Approximately 380 °C (716 °F)

Softening point: Begins at 70 °C (158 °F) **Bulk density**: Approximately 608.7 kg/m3

10. Stability and Reactivity

Hazardous Reactions: Hazardous polymerisation does not occur.

Stability: Stable

Materials to avoid: None known Conditions to avoid: None known

Hazardous decomposition products: By Fire and Thermal Decomposition: Phenol; Carbon oxides, Hazardous decomposition products due to incomplete combustion.

11. Toxicological Information

Toxicity Data for Lumishield EX, Smooth/Smooth **Toxicity Note**: No data available for this product.

12. Ecological Information

Ecological Data for Lumishield EX, Smooth/Smooth

Additional Ecotoxicological Remarks: No data available for this product.

13. Disposal Considerations

Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental control laws.

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14. Transport Information

Land transport (DOT): Non-Regulated Sea transport (IMDG): Non-Regulated Air transport (ICAO/IATA): Non-Regulated

15. Regulatory information

United States Federal Regulations

OSHA Hazcom Standard Rating: Non-Hazardous **US. Toxic Substances Control Act:** Excluded: Article.

US. EPA CERCLA Hazardous Substances (40 CFR 302): Components None

SARA Section 311/312 Hazard Categories: Non-hazardous under Section 311/312 US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 302 Extremely Hazardous Substance (40 CFR 355, Appendix A): Components None US. EPA Emergency Planning and Community Right-To-Know Act (EPCRA) SARA Title III Section 313 Toxic Chemicals (40 CFR 372.65) - Supplier Notification Required: Components None

US. EPA Resource Conservation and Recovery Act (RCRA) Composite List of Hazardous Wastes and Appendix VIII Hazardous Constituents (40 CFR 261) Under RCRA, it is the responsibility of the person who generates a solid waste, as defined in 40 CFR 261.2, to determine if that waste is a hazardous waste.

16. State Right-to-Know Information

The following chemicals are specifically listed by individual states; other product specific health and safety data in other sections of the MSDS may also be applicable for state requirements. For details on your regulatory requirements, you should contact the appropriate agency in your state. The concentrations reported below in units of parts per million (ppm) or parts per billion (ppb) are maximum values.

Massachusetts, New Jersey or Pennsylvania Right to Know Substance Lists: Weight percent Components CAS-No.

>=1% Bisphenol A Polycarbonate 25971-63-5

>=1% Bisphenol A Polycarbonate CAS# is a trade secret

>=1% Bisphenol A Polycarbonate CAS# is a trade secret

MA Right to Know Extraordinarily Hazardous Substance List:

Weight percent Components CAS-No.

<0.05% Phenol 108-95-2

<=3 ppm Methylene Chloride 75-09-2

California Prop. 65:

WARNING! This product contains chemical(s) known to the State of California to be Carcinogenic. Weight percent Components CAS-No.

<=3 ppm Methylene Chloride 75-09-2



MATERIAL SAFETY DATA SHEET

LUMISHIELD EX™

16. Other Information

HMIS Rating Health 0 Flammability 1 Physical Hazard 0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

* = Chronic Health Hazard

The method of hazard communication for Lumicor is comprised of Product Labels and Material Safety Data Sheets.

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