

# MATERIAL SAFETY DATA SHEET

No. J-1180E-14

Identity (As Used on Label and List)

- **Date Prepared:** November 18, 1998
- **Date Revised:** July 6, 2011

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## LUMIFLON LF600X

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### 1. PRODUCT AND COMPANY INFORMATION

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**Product Name:** LUMIFLON LF600X

**Synonym:** Fluoropolymer varnish

**General Use:** Paints

**MSDS Number:** J-1180E

**Manufacturer**

**Company Name:** ASAHI GLASS CO., LTD. Chemicals Company Fluorochemicals Division

**Address:** 1-12-1, Yurakucho, Chiyoda-ku, Tokyo, 100-8405, Japan

**Telephone No.:** +81-3-3218-5574

**Facsimile No.:** +81-3-3218-7843

**Supplier**

**Company Name:** AGC Chemicals Americas, Inc.

**Address:** 55 East Uwchlan Ave. Suite 201, Exton, PA 19341, USA

**24 Hour Medical Emergency Telephone #:** (800)420-8479

**24 Hour Transportation Emergency # (CHEMTREC):** (800) 424-9300

**Customer Service Number:** (800) 424-7833

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### 2. COMPOSITION/INFORMATION ON INGREDIENTS

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Components	CAS No.	%
Fluoropolymer	98728-78-0	50
Xylene	1330-20-7	26
Ethylbenzene	100-41-4	24

**OSHA Hazardous Components (29 CFR 1910.1200)**

Xylene and Ethylbenzene are hazardous components.

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### 3. HAZARDS IDENTIFICATION

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**Emergency overview**

Highly Flammable

May be harmful by inhalation, ingestion, or skin absorption.

**Inhalation:**

May cause irritation to the respiratory tract. High vapor concentrations may cause headaches, nausea and dizziness and can lead to loss of smell. The inhalation of droplets can lead to pneumonia.

**In contact with skin:**

Can be absorbed through skin. Repeated exposure to the liquid may give rise to cracking and defacing of the skin, possibly leading to irritation.

**In contact with eyes:**

Liquid splashes and high vapor concentrations can lead to irritation in the eyes.

**Ingestion:** Liquid ingestion may cause severe gastrointestinal pain, abdominal cramps, nausea, vomiting, narcosis and central nervous system depression.

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#### 4. FIRST AID MEASURES

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- **Inhalation:**  
Remove victims to fresh air. Seek medical attention.
- **Skin contact:**  
Remove contaminated clothing and wash well affected skin with plenty of soap and water. Seek medical attention.
- **Eye contact:**  
Flush eyes including eyelids, with plenty of water for at least 15 minutes. Get medical attention.
- **Ingestion:**  
Wash mouth out with water; give half pint water to drink. Don't induce vomiting unless directed to do by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention.

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#### 5. FIRE-FIGHTING MEASURES

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**Suitable extinguishing media:** Foam, Dry Chemicals, CO<sub>2</sub>

**Unsuitable extinguish media/methods:** DO NOT USE WATER!

**Hazardous combustion product or gases:**

If involved in a fire or if overheated, there is a risk of generation of toxic degradation products such as: hydrogen chloride, hydrogen fluoride, carbonyl fluoride, carbon monoxide, and carbon dioxide.

**Special protective equipment for fire fighters:**

Wear self-contained breathing apparatus in confined areas or when exposed to combustion products.

**Additional information**

Move container from fire areas if it can be done without risk.

Cool containers with water spray.

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#### 6. ACCIDENTAL RELEASE MEASURES

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**Personal precautions:**

Keep public away.

Ensure adequate ventilation.

Use personal protective clothing

**Environmental precautions:**

Shut off source of ignition and ventilate spill area.  
Do not wash away into shower or waterway.

**Methods for cleaning up/taking up:**

Absorb or contain liquid with inert material and dispose of in accordance with applicable regulations.  
Use suitable absorbent materials such as vermiculite, sand, or clay to clean up residual liquids.

**Additional information:**

Information for safe handling looks up chapter 7.  
Information for disposal looks up chapter 13.

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## 7. HANDLING AND STORAGE

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**Handling**

Avoid contact with skin and eyes. Atmospheric levels of vapor should be maintained as low as reasonably possible and below the Occupational Exposure Limit.  
Shut off all gas pilot and electrical (spark or hot wire ) igniters and other sources of ignition during use and until all vapors (odors) are gone.  
Prevent build-up of electrostatic charges (e.g. by grounding).

**Storage**

Floor surface of storage place should be made of non-permeable materials to the ground such as concrete. No fire and smoking in area of storage.  
Keeping at temperature not exceeding 25deg.C(77deg.F) is preferred when storing it for a long term.

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## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

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**Exposure Limit Values**

Chemical name	OSHA (1993)	ACGIH (2009)	NIOSH
Xylene	PEL-TWA: 100ppm	TLV-TWA: 100ppm STEL 150ppm	REL: TWA 100 ppm (435 mg/m <sup>3</sup> ) ST 150 ppm (655 mg/m <sup>3</sup> )
Ethylbenzene	PEL-TWA: 100ppm	TLV-TWA: 100ppm STEL 125ppm	REL: TWA 100ppm (435 mg/m <sup>3</sup> ) ST 125ppm (545 mg/m <sup>3</sup> )

**Exposure controls**

**Occupational exposure controls**

**Engineering Controls:**

Use with appropriate local exhaust ventilation.

**Personal protection:**

- **Respiratory protection:** Chemical cartridge respirator with an organic vapor cartridge.
- **Hand protection:** Impermeable gloves
- **Skin protection:** Suits as needed by the circumstance of use.
- **Eye protection:** Safety glass, goggles, face shield

**Additional recommendations:** Eyewash and safety shower should be ready for use.

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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- **Appearance and Odor:** Transparency liquid, Color No.2MAX(Gardner)
- **Chemical Formula:** Trade Secret
- **Flash Point (method):** 21.5deg.C (70.7deg.F)(S.C.C.)
- **Lower Explosive Limit:** 1-1.1vol% (Xylene or Ethylbenzene)
- **Upper Explosive Limit:** 7-7.6vol% (Xylene)
- **Autoignition Temperature:** 432deg.C (809.6deg.F)(Ethylbenzene)
- **Boiling Point:** 136deg.C (276.8deg.F)(Ethylbenzene)
- **Melting Point:** N/D
- **Vapor Pressure (20deg.C):** N/D
- **Specific Gravity (20deg.C):** 1.08
- **Solubility (20deg.C) in water:** insoluble(Fluoropolymer)
- **pH value (20deg.C):** N/A
- **Partition Coefficient:** N/D
- **Viscosity:** (ISO2431: 150.5sec.)
- **Solvent content:** Xylene 26%, Ethylbenzene24%

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## 10. STABILITY AND REACTIVITY

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**Conditions to avoid:** Overheating and cooling

**Stability:** Stable under normal temperature and pressure.

**Materials to avoid (Incompatibilities):** Strong oxidizing agents, Strong Reducing agents, Strong bases

**Hazardous decomposition products:**

In a fire situation, hydrogen chloride, hydrogen fluoride, carbon monoxide and carbon dioxide may liberate.

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## 11. TOXICOLOGICAL INFORMATION

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**((Fluoropolymer))**

**Acute toxicity:** N/D

**Genetic studies:** Ames Assay: N/D

**Other information (solvents)**

**Acute toxicity:**

Skin Irritation (rabbit): 500mg/24h MODERATE (Standard Draize Test) (Xylene)

Eye Irritation (rabbit): 5mg/24h SEVERE (Standard Draize Test) (Xylene), 500mg SEVERE (Standard Draize Test) (Ethylbenzene)

LD50 oral (rat): 4.3 g/kg (Xylene), 3.5 g/kg (Ethylbenzene)

LC50 (rat): 5000 ppm/4h (Xylene)

**Genetic studies:**

Chromosome aberration test (CHO): negative (NTP 1987) (Xylene) , negative (NTP 1984) (Ethylbenzene)

Sister chromatid exchange test (CHO): negative (NTP 1987) (Xylene) , negative (NTP 1984) (Ethylbenzene)

Mouse Lymphoma Cells: positive (NTP 1986) (Ethylbenzene)

Salmonella assays: negative (NTP 1984) (Ethylbenzene)

**Carcinogenicity**  
Ethylbenzene IARC:2B

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## 12. ECOLOGICAL INFORMATION

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**Biodegradability:** N/D  
**Bioaccumulation:** N/D  
**Other information:** N/D

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## 13. DISPOSAL CONSIDERATIONS

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Reuse when possible the residual product. Send waste product for thermal destruction, using high-temperature incinerators designed to burn fluorine compounds.

Because of a flash point below 60 deg.C (140 degrees Fahrenheit), discarded product is a hazardous waste, No.D001, under RCRA, 40CFR 261.21.

Reuse containers when possible, after thorough washing. Dispose of waste containers to authorized landfill, in accordance with local laws and regulations.

Comply with all federal, state and local regulations.

Do not dump this product into sewers, on the ground or into any body of water.

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## 14. TRANSPORT INFORMATION

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### US DEPARTMENT OF TRANSPORTATION(DOT)

**Hazardous Materials:** Yes

**Hazardous Materials Description and Proper Shipping Name:** RESIN SOLUTION

**Hazardous Class or Division:** 3

**Identification Number:** UN1866

**Packing Group:** III

**Label(s) Required:** 3

### Sea transport

**IMDG**

**Class:** 3

**Packing Group:** III

**UN Number:** 1866

**Proper Shipping Name:** RESIN SOLUTION

**Marine Pollutant:** No

### Air transport

**ICAO/IATA**

**Class:** 3

**Packing Group:** III

**UN Number:** 1866

**Proper Shipping Name:** RESIN SOLUTION

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## 15. REGULATORY INFORMATION

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**OSHA STATUS:** This product is hazardous under 29 CFR 1910.1200.

**TSCA STATUS:** All components are listed on the TSCA Inventory.

**SARA TITLE III**

**SECTION 302(40 CFR 355):**

None of the Chemicals in this product have a TPQ.

Name	CERCLA/SERA-hazardous substances and their Reportable Quantities
Xylene	=100 lb (45.4kg) final RQ
Ethyl Benzene	=1000 lb (454kg) final RQ

**SECTION 311/312(40 CFR 370):** Acute Health Hazard, Chronic Health Hazard, Fire Hazard

**SECTION 313(40 CFR 372):** Ethylbenzene, Xylene

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

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## 16. OTHER INFORMATION

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- **N/E:** Not Established
- **N/A:** Not Applicable
- **N/D:** No Data
- **ACGIH:** American Conference of Governmental Industrial Hygienists
- **S.C.C.:** Seta Closed Cup

### NFPA CODES

Flammability	Hazard	Instability
3	1	1

Revision Summary: Section 1-16(2004.6) Product name(2004.12)Section 7.9.11(2006.2) 1, 8(2006.9) 1, 9, 14(2009.4) 1(2009.9) 9(2011.7)

The product is not designed for special applications such as pharmaceutical, medical use.

The information given in this safety data sheet is for safety purposes only. It is given in good faith and based on the best knowledge and experience of the company at the date of issuing.

The company is not responsible for any loss or damage caused by the use of the product in applications for which it was not intended or for conditions of use contrary to the recommendations in this safety data sheet.

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