SAFETY DATA SHEET

LUMIFLON FE4400

1. IDENTIFICATION

Product Name: LUMIFLON FE4400
Synonym: Fluoropolymer emulsion
Recommended use of the chemicals: Paints
MSDS Number: J-3340HCS

Manufacturer
Company Name: ASAHI GLASS CO., LTD.
Address: 1-5-1, Marunouchi, Chiyoda-ku, Tokyo 100-8405, Japan
Telephone Number for Information: +81(0)3-3218-5040
Facsimile Number for Information: +81(0)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

2. HAZARDS IDENTIFICATION

The hazard classification
Not classified

Signal word
None

Hazard statements
None

Pictograms
None

Precautionary statements
None

Description of any hazards not otherwise classified
None
3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS No.</th>
<th>%</th>
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</thead>
<tbody>
<tr>
<td>Fluoropolymer</td>
<td>Trade Secret</td>
<td>48.5</td>
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<tr>
<td>Emulsifier</td>
<td>Trade Secret</td>
<td>2.5</td>
</tr>
<tr>
<td>Water</td>
<td></td>
<td>49</td>
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</tbody>
</table>

OSHA Hazardous Components (29 CFR 1910.1200)
None

4. FIRST AID MEASURES

- **Inhalation**: If exposed to fumes from overheating or combustion, move to fresh air. Consult a physician if symptoms persist.
- **Skin contact**: Wash well contact area with plenty of soap and water. Remove contaminated clothing and shoes. Get medical attention if irritation persists. Use the contaminated clothing after washing it well.
- **Eye contact**: Flush eyes including eyelids, with plenty of water for at least 15 minutes. Get medical attention.
- **Ingestion**: Get medical help.

5. FIRE-FIGHTING MEASURES

- **Suitable extinguishing media**: Use dry chemical, alcohol-resistant foam, water spray or carbon dioxide for surrounding fire.
- **Unsuitable extinguish media/methods**: none
- **Hazardous combustion product or gases**: This product is non-flammable. However, if involved in a fire or if overheated (>200deg.C(>392deg.F), there is a risk of generation of toxic degradation products such as hydrogen chloride, hydrogen 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. Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

6. ACCIDENTAL RELEASE MEASURES

**Personal precautions:**
Use personal protective clothing

**Environmental precautions:**
Collect contaminated water/firefighting water separately. Do not wash away into shower or waterway.
Methods for cleaning up/taking up:
Take up with absorbent material (e.g. sand, general-purpose binder)

Additional information:
Information for safe handling looks up chapter 7.
Information for disposal looks up chapter 13.

7. HANDLING AND STORAGE

Handling
Wear appropriate mask, goggles, and gloves to avoid contact with eyes and skins. Hands should be washed thoroughly after handling. Suitable ventilation should be used during application.

Storage
Keep away from sunlight and rain. Floor surface of storage place should be made of non-permeable materials to the ground such as concrete. Store in a cool, dry, well-ventilated location. Do not freeze. Do not store below 0 deg. C.

8. EXPOSURE CONTROL / PERSONAL PROTECTION

Ingredients with occupational exposure limits to be monitored
N/A

Exposure controls

Occupational exposure controls

Engineering Controls:
Use with appropriate local exhaust ventilation.

Personal protection:
- Respiratory protection: Ventilation, local exhaust
- Hand protection: Impermeable gloves
- Skin protection: Suites as needed by the circumstance of use.
- Eye protection: Safety glass, goggles, face shield

Other information
PNOC: Inhalable particulate 10 mg/m³, Respirable particulate 3 mg/m³

9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance and Odor: Opaque, white liquid. Slight odor.
- pH value (25deg.C): 6-10
- Boiling Point: 100deg.C
- Melting Point: none (as polymer OECD No.102)
- Flash Point (method): Non-flammable
- Auto Flammability: N/D
- Ignition Temperature: N/D
- Flammability: N/D
- Explosive Limits: (lower) N/D, (upper) N/D
- Oxidizing Properties: N/D
- Vapor Pressure (20deg.C): N/D
• Specific Gravity (25deg.C): 1.16
• Solubility (20deg.C) in water: Dispersible
• Viscosity (20deg.C): N/D

10. STABILITY AND REACTIVITY

Conditions to avoid: Overheating and cooling

Stability: Stable under normal temperature and pressure.

Materials to avoid (Incompatibilities): Strong oxidants

Hazardous decomposition products: In a fire situation, hydrogen chloride, hydrogen fluoride, carbon monoxide and carbon dioxide may liberate.

11. TOXICOLOGICAL INFORMATION

Acute toxicity: LD50 (rat) >2500mg/kg (OECD No.423)
Sensitization: N/D
Mutagenicity: Ames Assay: Negative (as fluoropolymer)

12. ECOLOGICAL INFORMATION

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

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code: Not regulated under RCRA, 40 CFR261
Reuse when possible the residual product. Send waste product for thermal destruction, using high-temperature incinerators designed to burn fluorine compounds.
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.

14. TRANSPORT INFORMATION

US DEPARTMENT OF TRANSPORTATION (DOT)
Hazardous Materials: N/A
Hazardous Materials Description and Proper Shipping Name: N/A
Hazardous Class or Division: Not classified
Identification Number: Not regulated
Packing Group: Not classified
Label(s) Required: Not classified

UN Number: N/A
IMDG Status: Not restricted
Marine Pollutant: No
ICAO/IATA Status: Not restricted
15. REGULATORY INFORMATION

OSHA STATUS: Not applicable
TSCA STATUS: All components are listed on the TSCA Inventory.
CERCLA/SUPERFUND (40 CFR 117, 302)
N/A

SARA TITLE III
SECTION 302(40 CFR 355): Not applicable
SECTION 311/312(40 CFR 370): Chronic Health Hazard
SECTION 313(40 CFR 372): Not applicable

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

16. OTHER INFORMATION

- N/E: Not Established
- N/A: Not Applicable
- N/D: No Data
- ACGIH: American Conference of Governmental Industrial Hygienists

NFPA CODES

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Hazard</th>
<th>Instability</th>
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<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
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</table>

Revision Summary: updated according to 29CFR 1910.1200(g), Section 7,9(2016.1)

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.