



LUMIFLON FE4400

FEVE Waterborne Resin Polyol

PRODUCT DESCRIPTION

LUMIFLON® FE4400 is a hydroxyl functional fluoroethylene vinyl ether waterborne resin used in applications requiring outstanding exterior durability. It can be used as the sole binder or as a blending resin for coatings that need high performance at a low VOC. It can be crosslinked with polyisocyanates for air dry applications or either blocked polyisocyanates or amino resins for bake applications. Its high molecular weight makes it suitable for 1K coatings as well. Markets include light duty industrial coatings, architectural coatings, aerospace coatings, automotive coatings, and coatings for concrete.

CHARACTERISTICS

- Outstanding weathering, chemical resistance, and water resistance
- Cures under ambient conditions for field applications or with heat for factory settings
- Applications include architectural and light duty industrial

TYPICAL PROPERTIES

Property	LUMIFLON FE4400
Appearance	Opaque White
Weight Solids, %	50
pH	7-9
Hydroxyl Value, mgKOH/g polymer	49
Particle Diameter, nm	100-200
Specific Gravity, 25°C	1.16
MFFT, °C	55
Ionic Character	Anionic

STARTING POINT FORMULATIONS

2K White Pigmented Topcoat with LUMIFLON FE4400

Cure Conditions: Flash off- 10min. at 40°C, Bake- 30min. at 150°C
Substrate: Chromated Aluminum Panels, 8mm

PIGMENT PASTE

Trade Name	Type	Parts by Weight
Water	Diluent	23.65
Hydropalat 3275 (BASF)	Dispersant	3.60
Dehydran 1620 (BASF)	Defoamer	0.75
Ti-Pure R-706 (Chemours)	Pigment	72.00
Total		100.0

LET DOWN

LUMIFLON FE4400	Resin	100
Pigment Paste Above	Pigment	34.7
Texanol	Coalescent	5.0
Bayhydur BL5140 (Covestro)	Crosslinker	29.9
Total		169.6

Property	Result
Gloss, 20/60 (ISO2813)	65/82
Crosscut Adhesion (D3359)	5B
Pencil Hardness, Gouge (D3363)	4H
Flexibility, Cupping Test- Cracking (ISO 1520)	>6mm
Impact Resistance Intrusion/Extrusion D=0.5in, 0.5kg (D2794)	>0.5m/ >0.5m
H ₂ O Resistance, 40°C, 24h (ISO 2812) Adhesion, Wet/Dry (D3359) Blistering (D714)	5B/5B None

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AGC Chemicals Americas, Inc.
Business & Technical Center
55 E. Uwchlan Ave, Suite 201
Exton, PA 19341
Phone: 610.423.4300
Fax: 610.423.4301
<http://www.agcchem.com>

STORAGE AND HANDLING

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.

Wear appropriate safety glasses and gloves to avoid contact with eyes and skins. Hands should be washed thoroughly after handling. Suitable ventilation should be used during application.

PACKAGING

16kg pail
200kg drum

For more information and samples contact

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55 E. Uwchlan Avenue, Suite 201
Exton, PA 19341

Phone: (610) 423-4300 | Fax: (610) 423-4301

info@lumiflonusa.com

www.lumiflonusa.com

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