



LUMIFLON LF916F

FEVE Resin Polyol

PRODUCT DESCRIPTION

LUMIFLON® LF916F is a fluoroethylene vinyl ether polyol used in applications requiring outstanding exterior durability and excellent chemical resistance. It is formulated into low VOC, 2K crosslinkable coatings. It has a lower molecular weight combined with a high hydroxyl value for formulating highly crosslinked 2K coatings with excellent performance properties. Markets include heavy 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
- Applications include low VOC general industrial, heavy duty, and architectural coatings

TYPICAL PROPERTIES

Property	LUMIFLON LF916F
Appearance	Flake
Weight Solids, %	>99
Hydroxyl Value, mgKOH/g polymer	100
Hydroxyl Equivalent Weight	561
Weight/Gallon, lb/gal	11.6
Softening Point, °C	117
Glass Transition Temperature, °C	34

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The data given in this product bulletin is for information purposes only. It is given in good faith and based on the best knowledge and experience of the company. This product should be used only in applications for which it was intended. This product is not designed for special applications such as pharmaceutical or other medical use. The company makes no warranties and undertakes no responsibilities regarding this product except as stated in contract documents for its supply.

STARTING POINT FORMULATIONS

Low VOC 2K Clear Topcoat with LUMIFLON LF916F

LF916F SOLUTION

Trade Name	Type	Parts by Weight	
		t-BAC	PCBTF
LUMIFLON LF916F	Flake Resin	60	50
t-Butyl Acetate	Solvent	40	
p-chlorobenzotrifluoride	Solvent		50
Total		100	100

PART A: Add all ingredients under agitation

Trade Name	Type	Parts by Weight	
		t-BAC	PCTBF
LUMIFLON LF916F Solution	Resin Sol.	75	81.6
n-Butyl Acetate	Solvent		3.4
Xylene	Solvent	8.7	
0.1% DBTDL (in Xylene)	Catalyst	0.15	0.15
Total		83.8	85.2

MIXED PAINT: Add all ingredients under agitation

Above Formulation	Part A	83.8	85.2
Desmodur® N3300A (Covestro)	Poly-isocyanate	16.2	14.8
Total		100	100

Property	Result	
	t-BAC	Oxsol®
Solids Content, wt%	61.2	55.6
Reduced Solids, wt%		51
Viscosity, cP	352	938
Viscosity reduced, cP		398
NCO/OH Index	1.05	1.04
VOC, g/L	<100	<100



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2K White Coating with LUMIFLON LF916F

WHITE DISPERSION: *Grind to Hegman 7+*

Trade Name	Type	Parts by Weight
LUMIFLON LF916F Solution	Resin Sol.	29.7
n-Butyl acetate	Solvent	3.0
Disperbyk® 110 (Byk)	Dispersant	1.2
Ti-Pure™ R960 (Chemours)	Pigment	29.7
Total		63.6

PART A: *Add all ingredients under agitation*

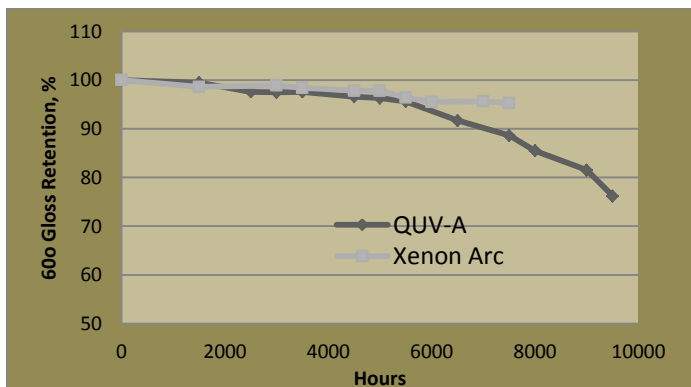
Trade Name	Type	Parts by Weight
White Dispersion	Pig. Paste	63.6
LUMIFLON LF916F Solution	Resin Sol.	19.3
n- Butyl Acetate	Solvent	2.89
0.1% DBTDL (in Xylene)	Catalyst	0.21
Tinuvin® 292 (BASF)	HALS	0.9
Tinuvin® 400 (BASF)	UVA	1.3
Total		88.2

MIXED PAINT: *Add all ingredients under agitation*

Trade Name	Type	Parts by Weight
Part A		88.2
Desmodur® N3300A (Covestro)	Poly-isocyanate	11.8
Total		100.0

Property	Result
Solids Content, wt%	76.76
Volume Solids, %	62.36
Weight/Gallon, lb/gal	11.93
PVC	17.47
NCO/OH Index	1.05
VOC, g/L	333

Weathering Data of a 2K White with LF916F



SOLUBILITY OF LF916F (ASTM D4287)

Solvent	Solids, wt. %	Viscosity, cPs
Xylene	50.1	202
t- Butyl Acetate	42.9	869
Oxsol® 100	50.5	1748
Acetone	65.0	240
Dimethyl Carbonate	60.0	375
Propylene Carbonate	Insoluble	
Methyl Ethyl Ketone (MEK)	70.6	922
Methyl Amyl Ketone (MAK)	63.3	579
Methyl Propyl Ketone (MPK)	62.7	272
Methyl Isobutyl Ketone (MIBK)	62.1	354
Methyl Acetate	66.7	565
n-Butyl Acetate	62.5	613
PM Acetate	49.5	192
Ethyl 3-Ethoxy Propionate (EEP)	48.6	160
Propyl Cellosolve	51.1	452

STORAGE AND HANDLING

Keep away from sunlight and rain. 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

20kg Carton

For more information and samples contact

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