

# TREATMENTS AND COATINGS FOR METAL SUBSTRATES

## COMPARATIVE PROPERTIES AND PERFORMANCE CHART-COIL COATING TOPCOATS

### GENERIC COATING TYPE (TOPCOAT ONLY)

Physical and Resistance Properties	ASTM Method	Lumiflon (FEVE)	Solution Acrylic	Polyester		Silicone Polyester	Poly(vinylidene) Fluoride (PVDF)	Acrylic Latex	Polyurethane
				Interior use Only	Exterior Use				
Impact Resistance	D2794	4	2	3-5	3	4	4	3	4
Mar Resistance	D3363, D2197	4	4	4	4	3	3	3	3
Metal Marking Resistance	No Method	4	4	4	4	3	3	4	3
Resistance to Pressure Mottling in Coil	D3003	4	4	4	4	3	3	3	3
Solvent (MEK) Resistance	D5402	4	4	3-5	5	3	3	4	3
Grease & Oil Resistance	D5402, D1308	4	3	3-5	4	4	4	3	3
Stain Resistance	No Method	3-4	4	3-5	4	4	4	3	3
Resistance to Acidic/Caustic Conditions	D2248, D1308	4	3	3-4	3	4	4	4	3
Resistance to Water Immersion	D870	4	4	4	4	4	4	2	3
Humidity Resistance	D1735, D2247, D4585, G60	4	4	4	4	4	4	2	4
Abrasion Resistance	D4060, D968	4	3	3-5	3	4	4	3	3
Resistance to Industrial Pollution	D1308, G87	4	3	3	3	4	4	3	3
Corrosion Resistance (Salt Spray)	B117, G85	3	3	4	4	3	3	3	4
Flexibility/Drawability	D2794, D3281, D4145, D522, D4146	4	2	3-5	3	4	4	3	4
Dry Heat Resistance	No Method	4	3	4	4	4	4	4	5

Weathering Properties	ASTM Method	Lumiflon (FEVE)	Solution Acrylic	Polyester		Silicone Polyester	Poly(vinylidene) Fluoride (PVDF)	Acrylic Latex	Polyurethane
				Interior use Only	Exterior Use				
Gloss Retention 5 yrs. Florida, 45° South	D523	5			2-3		5		
Chalk 5 yrs Florida, 45° South	D4214, D659	5			2-3		5		
Color Retention 5 yrs. Florida, 45° South	D822, G23, G26, G53	5			2-3		5		

5=Excellent, 4=Very Good, 3=Good, 2=Fair, 1=Poor