POLYMATE Ltd.
International Nanotechnology Research Center

ECPU 5851 W-P

Indoor application

TECHNICAL DATA SHEET

PROPERTIES	UNIT	STANDARD	VALUE
General			
Type of the product	Two-component hybrid nonisocyanate polyurethane coating (Varnish)		
Use	Coating for indoor light stable applications.		
Substrate	Concrete, cement cover, gypsum, wood, metal.		
Physical Properties			
Ratio of components (Base "A" : Hardener "B" Uramine 4761)	~ 4A:1B		
Viscosity Part A Viscosity Part B Viscosity Parts A &B at 77ºF (25ºC): (Brookfield RVDV II, Spindle 29, 20 rpm) at 77ºF (25ºC)	cPs	**ASTM D2393**	1000-1500 400-600 ≤1200
Density at 77ºF (25ºC): Base "A" Hardener "B" (Uramine 4761) Mixture "A" + "B"	g/cm^3 (lb/gal)		 1.0-1.1 (8.4 – 9.3) 1.0-1.05 (8.4 – 8.9) 1.0 -1.05 (8.4 - 8.9)
Thickness of the layer of coating recommended.	Mils (ft^2/gal) µm(m^2/L)		Up to 4 (400min.) Up to100 (10min)
VOC		**ASTM D2369**	Compliant
Application temperature	Fº (ºC)		59-77Fº (15-25ºC):
Curing time at 59-77Fº (15-25ºC): • Pot Life • Dry to Touch • Full cure	 min hours days		 60-30 12 - 6 10-7
Appearance			Colorless, gloss
Specular gloss, initial, 60º		**ASTM D523**	80- 90
Pencil Hardness, 48 hours 7 days		**ASTM D3363**	F 2H
Impact resistance, punch 0.625 in, weight 4 lbs, CS δ = 1 mm	lb. in	**ASTM D2794**	≥ 60

Chemical and Stain Resistance			
Weight gain (24 h @ 25ºC) at immersion: - in water - in 10% H_2SO_4 - in 10 % NaOH	%	**ASTM D570**	 0.1-0.5 0.5-1 0.1-0.5
Gasoline			No effect
Diesel fuel			No effect
Motor oil			No effect
Vegetable oil			No effect
Brake fluid			No effect
Skydrol (aviation hydraulic fluid)			No effect