

# Industrial Coating - Competitive Analysis

Property	Test Method	Nano Activated Coatings Nano-Clear® NCI	DuPont IMRON® 2.1 HG-C	DuPont IMRON® 3.5 HG-D
Mfg. Recommended Use		Newly Painted or Highly Oxidized Paints	Newly Painted Only	Newly Painted Only
Polymer Chemistry		Nanostructured Polyurethane Hybrid	Polyurethane Copolymer	Polyurethane
Mixing Ratio	Ratio	1K - no mixing (labor savings)	1K – no mixing	2K - 2:1 Ratio
Recommended Dry Film Thickness (mils)	ASTM D5796	1 mil (2X - 5X less material)	3 mils	5 mils
Pencil Hardness	ASTM D3363	4H (3X – 5X harder)	H	F
Pendulum Hardness (Persoz)	ASTM D4366	220	N/A	24
Abrasion Resistance (CS- 17, 1 kg, 1000 cycles)	ASTM D4060	8.4 mg loss (superior abrasion)	N/A	N/A
Impact Strength (kg-cm)	ASTM D2794	> 140	> 160	> 100
Water Immersion Test	ISO 2812-2	Pass	Pass	Pass
QUV Resistance (> 1500 hours)	ASTM D4587	100%	94%	90%
Xenon WOM (> 2000 hours)	ASTM G155	99%	N/A	N/A
MEK Resistance	ASTM D4752	>1500	>200	>100
Salt Fog (1500 hours)	ASTM B-117	No rust, no blisters.	No rust, no blisters.	No rust, no blisters.
DMA – Crosslink Density (dynamic mechanical analysis)	XLD (X10 <sup>3</sup> mol/m <sup>3</sup> )	2.17	N/A	N/A