

Competitive Analysis

Property	Method	Nano-Clear® NCI Coating	Axalta IMRON® 2.1 HG-C	Axalta IMRON® 3.5 HG-D	PPG Amercoat PSX® 700
Mfg. Recommended Use		Newly Painted or Sanded Oxidized	Newly Painted Only	Newly Painted Only	Newly Painted Only
Polymer Chemistry		Nanostructured Polyurethane / Polyurea Hybrid	Polyurethane Copolymer	Polyurethane	Epoxy Polysiloxane Hybrid
Mixing Ratio	Ratio	1K - no mixing	1K – no mixing	2:1 Mix Ratio	4:1 Mix Ratio
Recommended Dry Film Thickness (mils)	ASTM D5796	2 mil	3 mils	5 mils	5 mils
Pencil Hardness	ASTM D3363	4H - 7H	H	F	N/A
Pendulum Hardness (Persoz)	ASTM D4366	220	N/A	24	N/A
Abrasion Resistance (CS-17, 1 kg, 1000 cycles)	ASTM D4060	8.4 mg loss	N/A	N/A	53 mg loss
Impact Strength (kg-cm)	ASTM D2794	> 140	> 160	> 100	N/A
Water Immersion Test	ISO 2812-2	Pass	Pass	Pass	Pass
QUV Resistance (> 1500 hours)	ASTM D4587	100%	94%	90%	50%
Xenon WOM (> 2000 hours)	ASTM G155	99%	N/A	N/A	N/A
MEK Resistance	ASTM D4752	>1500	>200	>100	>100
Salt Spray (5000 hours)	ASTM B-117	No rust, no blisters.	No rust, no blisters.	No rust, no blisters.	No rust, no blisters.
DMTA – Crosslink Density	XLD (X103 mol/m3)	2.17	N/A	N/A	N/A
Competitive Commentary		Nano-Clear has been awarded the NACE Innovation of the Year Award for Corrosion, F&S Technology Leadership Award and PaintSquare Top Product Award for Steel.	NCI has 4X better scratch resistance, but similar UV resistance to Imron.	NCI has 5X better scratch resistance, similar UV resistance + 50% less DFT.	NCI has 6X better abrasion resistance, 50% better UV resistance + 50% less DFT.