

“*S a f e c o a t*®

Exteria Satin

Testing Date for Smooth and Aggregate

Physical Properties – tests run prior to application of paint

Test	Results
Density	10.00-11.92 lbs per gallon depending on color and whether aggregate is present or not
Fineness of Grind	Smooth 6+ / Aggregate –N/A
Freeze-Thaw Resistance ASTM D2243	3 cycles
In-Can Properties (surface consistency, skin, separation, extraneous matter, settlement and clarity)	No skin, no separation after 1 month, no extraneous matter-settlement. Clarity –NA with pigmented system. Storage life 1-2 years at ambient conditions/closed can. O/A=VeryGood
Non-Volatile Content %	54-55%
Opacity-Contrast Ratio over Black/White using White P0 Base	98-99
pH	7.5-8.5
Viscosity-K.U> Krebs Units	98-105
Volume Solids %	39-41%

Physical Properties – Tests run on applied films

Test	Results
Abrasion ASTM D4060, Tabor CS17, 1000g load	Good: 260mg loss/ 1000 cycles
Adhesion ASTM D3359, Method A	Excellent: 5A, No peeling or removal
Blistering- early blister resistance over Alkyd Paint	10
Block Resistance ASTM D2793, 2 kg/in ² @ 120°F	Very Good-Excellent- some deeper colors with ZeroVOC colorants slight sticking. Accent Colors not tested.
Chalking- 43 months unprimed	5+
Cracking- 25 months unprimed metal	5
Cupping	Not Run
Dispersion - Dispersability	Rating of 9
Drying Time- Tack Free – Optimum Cure – Full Cure	4 hours – 72 hours – 3 weeks. Some colors may dry and cure longer.
Film Thickness-mils	3-4 DFT under normal conditions
Flaking-25 month exterior exposure to primed metal- extreme conditions	5+
Flash Point	Non-Flammable, like water
Flexibility ASTM DI 737, 180~ bend, 1/8" mandrel	Excellent: No cracking or flaking
Flow-out	Good. Formulated for multiple tool application. Some film build expected.
Hardness ASTM D3363, Pencil	Very Good: B

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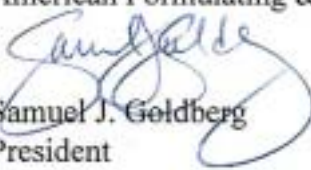
Impact resistance ASTM D4585	Very Good: 100 in-lbs
Minimum Film-forming Temperature	27 deg C
Permeability to Water	3 coats = very good resistance
Scrub Resistance	1500+
Stain Resistance ASTM D1308, washed with soap and water after 24 hours contact. (coffee, grape juice, mustard, lipstick, food coloring)	Good overall, fair with oils, little affect. Coating performed best with clear overcoat system.

Durability tests run after film has cured on substrate

Test	Results
Accelerated Weathering:	2000 hours QUV < 7% loss of gloss, 0 adh. loss
Controlled Temperature / Humidity Exposure	65 cycles with no loss of adhesion /5% loss gloss
Freeze-Thaw Cycling - Substrate	65 cycles with no loss of adhesion
Light fastness	Good, depending on pigment added 6-1/2 **
Natural Weathering	Good Exterior Weathering – Good UV/Moisture
Water Soak - Resistance	Good – Very Good Resistance

** Exposure for 45 months revealed good stability and lightfastness with white and light off white colors. Darker colors showed some signs of lower resistance to fading.

American Formulating & Manufacturing


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