

Ply-Guard TC

Technical Bulletin

Ply-Guard TC is a two component, high solids aliphatic polyurethane. This product offers a remarkable combination of performance properties not found in other polymer coatings. Ply-Guard TC produces protective films which are hard, flexible and very impact resistant. These coatings feature high abrasion and scratch resistance, exterior durability, easy soil release, and excellent resistance to a broad range of chemicals. For exterior applications, a UV stabilizer package is incorporated to insure long term chalk resistance and gloss retention. A special accelerator is available when rapid project turnaround is required.

Ply-Guard TC has been designed as a high performance top coat in various protective coating and seamless flooring applications. It provides maximum cleanability and stain resistance when used as a finish coat in color chip flooring or epoxy-quartz flooring. This coating is ideally suited for clean-room floors, automotive repair facilities, aircraft hangars, and other high-wear areas requiring resistance to fuels and chemicals. When used as a finish coat in wall coating systems, anti-graffiti properties are greatly enhanced.

Chemical Composition: Saturated polyester crosslinked with aliphatic polyisocyanate.

Colors & Limitations

- Sixteen (16) Standard Colors, Plus Clear
- Do Not Use on Unprimed Substrate
- Use of Satin Material Requires the Addition of Accelerator During Mixing
- Pigmented Version Not Available in Satin

Technical Data:

Mix Ratio, by Volume:	2:1
Solids Content, by Weight, Pigmented, %:	73.5
Solids Content, by Volume, Pigmented, %:	62.5
Solids Content, by Weight, Clear, %:	63.5
Solids Content, by Volume, Clear, %:	58.5
VOC, Pigmented, gr./lt.:	420
Viscosity, cps, 77°F, average:	500
Pot Life, 77°F, 1 Quart Mass, Hours:	2
Pot Life, 95°F, 1 Quart Mass, Hours:	1

Pot life is reduced by increasing the temperature and/or mass

Dry Times, 77°F

Dry To Touch, Hours:	4-6
Recoat, Hours:	10-12
Light Traffic, Hours:	24
Full Cure, Days:	7

Higher temperatures will shorten cure time and lower temperatures will lengthen cure time.

Properties Performance

Gloss, 60°:	90-95
Gloss, Satin Material, 60°:	50-60
Hardness, Sward;	30
Tabor Abrasion, 1000 gm. Load 1000 Cycles, CS-17 Wheel:	34 mg loss

Flexibility, ASTM D222: Passes 1/8 inch

Impact Resistance, ASTM D2794: Passes 160 inch-pound direct and reverse

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Chemical & Stain Resistance (ASTM D1308 24 Hour Immersion)	
Urine	No Effect
Blood	No Effect
Whiskey	No Effect
Black Ink	No Effect
Brake Fluid	No Effect
Gasoline	No Effect
Skydrol B-4	No Effect
Hydraulic Fluid #83282	No Effect
Mineral Spirits	No Effect
Xylene	No Effect
MEK	Film Softened
50% Sodium Hydroxide	No Effect
25% Hydrochloric Acid	No Effect
25% Sulphuric Acid	No Effect
25% Acetic Acid	No Effect
25% Nitric Acid	Film Blistered

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