

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

- Do Not Use on Unprimed Substrate
- Must be applied at recommended 6-8 WFT

Technical Data:

Mix Ratio, by Volume:	2:1
Solids Content, by Weight, %:	62.5
Solids Content, by Volume, %:	57.5
VOC, Pigmented, gr./lt.:	395
Viscosity, cps, 77°F, average:	500
Recommended Coverage Rate (ft²/gal.):	255-270
Pot Life , 77°F, 1 Quart Mass, Minutes:	60-90

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

Dry Times, 77°F

Dry To Touch, Hours:	4-6
Recoat, Hours:	12-24
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
Hardness, Sward:	30

Taber Abrasion (ASTM D4060)

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
--	--

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2017 Polyset Company, Inc. All rights reserved. Revised 6/14/2024

Ply-Guard TC

Technical Bulletin

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

Limited Warranty: Polyset Company Inc. makes no warranty, expressed or implied, including any warranty of merchantability of fitness for a particular purpose. The sole remedy of Purchaser for any claim concerning this product, including, but not limited to, claims alleging breach of warranty, negligence, strict liability or otherwise, is the replacement of product or refund of the purchase price, at the discretion of Polyset Company Inc. Any claims concerning this product shall be submitted in writing within one year of the delivery date of this product to Purchaser and any claims not presented within that period are waived by Purchaser. IN NO EVENT SHALL POLYSET COMPANY INC. BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDES LOSS OF PROFITS) OR PUNITIVE DAMAGES. Copyright © 2017 Polyset Company, Inc. All rights reserved. Revised 6/14/2024