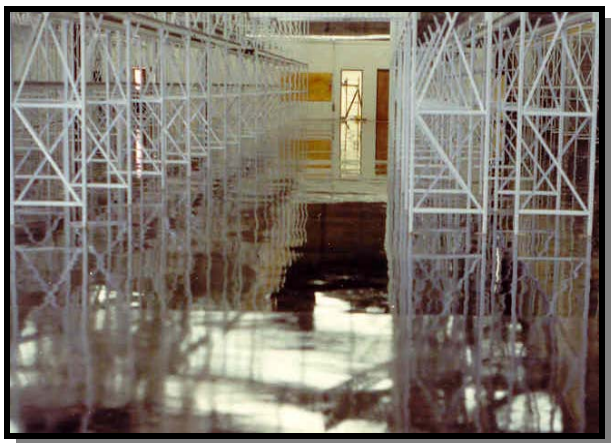


FT540 High Solids VOC Urethane



DESCRIPTION

FT540 High Solids VOC Urethane is an oil-free, VOC compliant, clear moisture cure urethane coating for concrete floors that can be applied in one coat. Replaces two coats of conventional urethane with applicable primer. Additionally, FT540 can be used as a clear coat or in combination with FloorTech® pigment to provide a variety of colored floors.

ADVANTAGES

- VOC compliant in 420 g/l regulated districts
- Minimize downtime with reduced installation time
- Provides exceptional durability and ease of cleanup
- Resists oil and grease and many other chemical spills
- Exhibits light reflective properties
- Maintains a glossy finish and extends useful life of floors

RECOMMENDED USES

- Warehouses
- Manufacturing
- Retail Outlets
- Storage Centers

PACKAGING

Available in five and fifty-five gallon units.

FOR BEST RESULTS

- For interior use only
- Not to be used when the relative humidity is greater than 75%
- Do not thin material
- Do not allow material to puddle
- Apply each coat within twenty-four hours of previous coat
- Discard any material subject to freezing
- Surface temperature must exceed 65°F
- New concrete must be cured for sixty days at at least 65°F
- Allow each coat to dry tack free before coating
- Do not apply to structurally unsound surface

GENERAL DATA

Application Temperature & Humidity	55°—90°F @ <75% RH
Colors	Clear and colorant available
Percent Solids By Weight	59% ± 1.0%
VOC	403 g/l (Clear)
Film Thickness	First coat—3.0 Second coat—2.7 optional
Cure Rate @ 75°F	
Recoat	6 to 8 hours
Foot Traffic	10 to 14 hours
Heavy Traffic	24 hours

TEST / PHYSICAL PROPERTIES

Test	Description	Values
Impact Resistance	Forward / Backward	160
Abrasion Resistance	Taber Abrasion CS-17 Wheel, 1000 cycles, 1000 gm load	24 mg loss
Gloss (60°F)		90
Hardness D		40
UV Light Resistance	Q-U-V Accelerated Weather Tester	Fair

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AVAILABLE COLORS



White (#547) Yellow (#546)
Custom Colors (#548)

COVERAGE

First Coat: 250-300 sq. ft. per gallon.
Optional Second Coat: 275-325 sq. ft. per gallon.

CAUTION AWARENESS

As with all high performance coatings, the cured product may become slippery when wet or if exposed to oily conditions.

For a procedure incorporating aggregate to obtain a non-slip finish, contact your FloorTech®/IFC Sales Representative.

This product may contain solvents and is recommended for use only in areas with adequate ventilation.

LIMITATIONS

This product is not designed for exterior use, immersion, or any use where moisture can reach the underside of the coating. Do not apply to floors previously treated with curing and parting compounds or other coatings unless they have been completely removed by chemical or mechanical means. Do not use on vinyl, asphalt, rubber, glazed tile, paving brick, quarry tile, Mexican tile, or similar materials.

Before applying for protection against specific chemical environments, consult Chemical Resistance Guide or FloorTech® Technical Service.

Sealed surfaces may discolor under tires due to tire plasticizer migration.

If the product is to be applied in or near areas containing food stuffs, they should be removed before the application and until the coating has fully cured and all vapors have dissipated.

Do not thin this product. Addition of thinners will slow the curing times and reduce the ultimate coverage properties of this product. Critical window for the application of second coat times will also be affected.

FLOOR INSPECTION

The area to be surfaced must be a minimum of 60 days old, clean, sound and above 60°F.

The surface must be checked to determine if a curing compound and/or coating is present.

Moisture content of all concrete surfaces to be coated and/or resurfaced must be checked to determine the presence of excess moisture or moisture vapors.

Moisture Test Options:

1. *Polyethylene Sheet Method*—apply 2x2' plastic sheet to the surface to be tested with duct tape. After 24 hours, check underside for presence of moisture.
2. *Delmhorst Moisture Meter*—this is an electrical resistance test to measure moisture content. Two holes are made in the area to be tested and two probes are inserted and a measurement is taken. A reading of >20 indicates the presence of moisture.
3. *Calcium Chloride Test*—Most accurate to measure vapor transmission by absorbing anhydrous calcium chloride. A premeasured lid is placed under an airtight cover for 60 hours after which the lid containing calcium chloride is measured and the increase in weight is a measurement expressed in pounds of water per 1,000 sq. ft. A reading above 3 indicates the presence of moisture.

SURFACE PREPARATION

The proper profile recommendation is important because it determines the thickness, bond strength and wearing characteristics of the system used. A thin mil protective coating will require a tightly textured low profile to maximize bond and provide flatness to maximize durability and reflectivity.

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Product Information

The International Concrete Repair Institute (ICRI) Guideline No. 03732 has set forth a numerical, surface profiling indicators to be specified for various coating systems — from CSP 1 (Concrete Surface Profile) for 0—3 mil coatings to CSP 9 for >125 mil for synthetic overlays.

FloorTech® adheres to the surface profile guidelines on all coating systems as established by ICRI.

MECHANICAL PREPARATION

Coating / overlay that requires a profile greater than a CSP 3 should be profiled mechanically by shot blasting or manual scarifying/grinding. Surface should be left with a uniform CSP texture.

Concrete

Ratings Key:	
E – Excellent	NR – Not Recommended
F – Fair	OS – Occasional Spillage
G – Good	

ICRI Guidelines

	Dry Mil	Coating System
CSP 1, 2 & 3	0—3 Mils	FT300/500 Series
CSP 2, 3 & 4	4—10 Mils	FT500 Series
CSP 4, 5 & 6	40—125 Mils	FT400 High Build Series
CSP 5, 6, 7, 8 & 9	>125 Mils	FT820 & FT900 Series

CHEMICAL PREPARATION

ASTM D-4258-83 Standard Practice for Surface Cleaning Concrete for Coating

ASTM D-4260-83 Standard Practice for Etching

REAGENT	CONC.	RATING	
		CLEAR	PIGMENTED
SOLVENTS - CHLORINATED			
Methylene Chloride	100%	E	E
Perchloroethane	100%	E	G
1,1,1, Trichloroethane	100%	G	E
Trichloroethylene	100%	G	G
AUTO-BRAKE - HYDRAULIC FLUIDS			
Brake Fluid	100%	F	F
Hy-Jet Fuel #3	100%	NR	F
Motor Oil	100%	E	E
Skydrol500A	100%	F	F
Skydrol500B	100%	F	F
Transmission Fluid	100%	E	E
ALCOHOLS			
Diacetone Alcohol	100%	F	E
Ethyl Alcohol	100%	G	F
Ethylene Glycol	100%	E	E
Glycerine	100%	E	E
Isopropyl Alcohol	100%	E	F
Methyl Alcohol	100%	F	G
Phenol	5%	NR	NR
Triethylene Glycol	100%	E	E

REAGENT	CONC.	RATING	
		CLEAR	PIGMENTED
MISCELLANEOUS CHEMICALS			
Acrylonitrile	100%		F
Aniline	100%	NR	NR
Beer	100%	E	E
Bromine	100%	NR	NR
Butyl Lactate	100%	F	G
Carbon Disulfide	100%	E	E
Carbon Tetrachloride	100%	G	F
Chloroform	100%	G	F
Cola	100%	E	E
Corn Oil	100%	E	E
Cyclohexane	100%	E	G
Cyclohexanone	100%	E	G
Diethyl Phthalate	100%	F	F
Dimethyl Phthalate	100%	F	F
Ethylene Dichloride	100%	G	G
Formaldehyde	100%	E	E
Fruit Juice	100%	E	E
Grease	100%	E	E
Hydrogen Peroxide	10%	E	E
Ketchup	100%	E	E
Lanoline	100%	E	E
Lard	100%	E	E
Linseed Oil	100%	E	E
Mayonnaise	100%	E	E
Methyl Salicylate	50% in Toluene	NR	NR
Milk	100%	E	E
Mustard	100%	E	F
2-Nitro-Propane	100%	E	E
Pyridine	100%	NR	NR
Sugar	Sat.	E	E
Tannic Acid	Sat.	E	E
Tartaric Acid	Sat.	E	E
Tide Solution	2%	E	E
Triacetin	100%	E	G
Triethanolamine	100%	E	E
Turpentine	100%	E	E
Water	100%	E	E
Wine	100%	E	E

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Chemical Resistance Guide

The following Chemical Resistance Guide will aid in determining the effect of various chemicals to FloorTech® Inc.'s FT540. Results are based on a 24-hour spot test under a watch glass sealed with paraffin at 77°F. The product tested was mixed and applied to a panel primed with FloorTech®'s WB Kwik Prime in accordance to FloorTech®'s standard specifications. The coating was allowed to cure for a minimum of seven days at 77°F prior to testing. Ratings for the pigmented version are based on the standard clear combined with FloorTech®'s FT270 Gray Color Add. A rating system for this guide is as follows:

Ratings Key:
E – Excellent **NR – Not Recommended**
F – Fair **OS – Occasional Spillage**
G – Good

REAGENT	CONC.	RATING	
		CLEAR	PIGMENTED
ORGANIC ACIDS			
Acetic	5%	E	E
Acetic	10%	E	E
Acetic	20%	F	F
Acetic	Glacial	NR	NR
Butyric	10%	NR	F
Citric	10%	E	E
Citric	50%	E	F
Cresylic	10%	F	F
Formic	10%	E	F
Lactic	10%	E	E
Lactic	25%	E	G
Maleic	30%	E	F
Maleic	60%	NR	NR
Malic	50%	NR	NR
Monochloro Acetic	5%	E	E
Monochloro Acetic	10%	G	F
Oleic	Sat.	G	G
Oxalic	Sat.	G	G
Picric	Sat.	G	G
INORGANIC ACIDS			
Boric	30%	G	G
Boric	Sat.	G	G
Chromic Acid	2%	G	F
Chromic Acid	10%	G	F
Chromic Acid	15%	F	F
Hydrochloric	10%	E	E
Hydrochloric	37%	E	G
Hydrochloric	Conc.	NR	NR
Hydrofluoric	10%	E	E
Hydrofluoric	24%	E	E
Hypochlorous	5%	G	G
Nitric	10%	E	F
Nitric	30%	F	NR
Nitric	Over 40%	F	NR
Nitric	Conc.	NR	NR
Perchloric	35%	F	F
Phosphoric	10%	E	F
Phosphoric	35%	E	F
Phosphoric	75%	NR	NR
Sulfuric	25%	E	E
Sulfuric	50%	F	F
Sulfuric	70%	NR	NR
Sulfuric	Conc.	NR	NR

REAGENT	CONC.	RATING	
		CLEAR	PIGMENTED
KEYTONES - ESTERS			
Acetone	100%	G	G
Amyl Acetate	100%	E	E
Butyl Acetate	100%	E	F
Ethyl Acetate	100%	G	F
Methyl Ethyl Ketone	100%	F	G
Methyl Isobutyl Ketone	100%	F	F
PM Acetate	100%	E	F
ALKALIES & SALTS			
Aluminum Chloride	50%	E	E
Ammonium Chloride	50%	E	E
Ammonium Hydroxide	10%	E	E
Ammonium Hydroxide	20%	E	E
Ammonium Hydroxide	50%	E	E
Ammonium Nitrate	Sat.	E	G
Ammonium Persulfate	Sat.	E	G
Ammonium Sulfate	Sat.	G	G
Calcium Chloride	50%	G	G
Calcium Hydroxide	Sat.	E	E
Calcium Hypochlorite	15%	G	F
Ferric Chloride	Sat.	G	E
Ferric Sulfate	Sat.	G	E
Potassium Hydroxide	40%	G	G
Sodium Bicarbonate	Sat.	E	G
Sodium Bisulfate	Sat.	E	G
Sodium Carbonate	Sat.	E	G
Sodium Chloride	20%	E	E
Sodium Hydroxide	10%	E	E
Sodium Hydroxide	50%	E	E
Sodium Hypochlorite	10%	E	F
Sodium Sulfate	Sat.	E	F
Sodium Sulfide	Sat.	G	F
Trisodium Phosphate	10%	E	E
Trisodium Phosphate	Sat.	E	E
SOLVENTS - ALIPHATIC			
Gasoline	100%	E	E
Hexane	100%	E	E
Jet Fuel A-1	100%	E	E
Mineral Spirits	100%	E	E
Naphtha	100%	E	E
SOLVENTS - AROMATIC			
Benzene	100%	E	E
Chlorobenzene	100%	G	F
SC-100	100%	E	E
Toluene	100%	E	G
Xylene	100%	E	E