



ChemMasters

DURAFLOW 550

SELF-LEVELING VINYL ESTER TOPPING

SPECIALTY CONSTRUCTION PRODUCTS

PRODUCT DATA

DESCRIPTION

Duraflow 550 is a two component, self-leveling vinyl ester topping applied at 1/8 in./125 mils. It is comprised of heavy bodied, vinyl ester resin and a catalyst.

USES

- Interior, horizontal concrete or steel substrates
- Industrial, commercial and warehousing applications
- Floors subjected to aggressive chemical attack
- Chemical and petrochemical processing and storage facilities

ADVANTAGES

- Superior resistance to solvents, organic and inorganic acids
- Cures rapidly for minimal downtime
- Excellent compressive and tensile strengths to withstand heavy industrial traffic
- Produces a smooth surface texture without trowel marks; accepts sand broadcast for nonslip characteristics
- Standard Duraflow 550 colors are Light Gray, Dark Gray and Tile Red. Other colors available subject to minimum order requirements.

TECHNICAL DATA

- USDA approved for incidental contact in federally inspected meat, fish and poultry plants

Gel Time of 150 ml/0.5 cup mass	
50°F/10°C	60 minutes
70°F/21°C	45 minutes
90°F/33°C	25 minutes

Tensile Strength (ASTM C 307) 2600 psi 18 MPa

Tensile Elongation (ASTM D 790) 7 days 5%

Compressive Strength (ASTM C-579)
12000 psi 83 MPa

RECOMMENDED SYSTEM COMPONENTS

PRIMER: Duraguard 500, vinyl ester primer with catalyst

TOPPING: Duraflow 550, 1/8 in./125 mils, self-leveling, vinyl ester topping with catalyst

TOPCOAT: Duraguard 520, vinyl ester coating with catalyst

PACKAGING

A standard unit of Durastone 550 consists of 2 U.S. gallons/7.5 Liters vinyl ester resin. Duraguard 500 Series catalyst is packed in 1 U.S. gallon/3.8 liter cans.

SYSTEM ESTIMATING GUIDE

	Ft. ² /Gal.	M ² /L
PRIMER: Duraguard 500—8 mils	175	4.29
TOPPING: Duraflow 550—125 mils	50	1.25
TOPCOAT: Duraguard 520—15 mils	100	2.45
Optional Broadcast Sand:	2 lbs./Ft. ²	9.8 Kg/M ²

DIRECTIONS

SURFACE PREPARATION: This is the most critical step in any coating application. All concrete must be mechanically or chemically profiled. For complete surface assessment and preparation guidelines, refer to ChemMasters Technical Bulletin, *Floor Preparation Guide*, or contact ChemMasters technical service staff.

PRIMING: To ensure maximum adhesion, an application of Duraguard 500 vinyl ester primer must first be used to prime the substrate prior to the application of Duraflow 550 vinyl ester topping. See Duraguard 500 technical data sheet for mixing and application instructions.

MIXING: Duraflow 550 must be mixed prior to application. Add the appropriate amount of catalyst based on minimum surface temperature to the resin.

50°F	6 oz	10°C	180 ml
70°F	4 oz	21°C	120 ml
90°F	2 oz	33°C	60 ml

Mix thoroughly with a low speed, high RPM drill equipped with a jiffler type mixing prop for approximately three (3) minutes.



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APPLICATION: Pour the mixed material onto the primed substrate and spread with a notched squeegee to specified thickness. While the Duraflo 550 is still wet, broadcast clean, dry silica sand to excess. Remove the excess sand before topcoating.

DRYING: Apply Duraguard 520 topcoat 12-24 hours after application of the basecoat.

Thin Film Tack Out	50°F/10°C	12 hours
	70°F/21°C	4-5 hours
	90°F/33°C	3 hours

Maximum recoat time without additional surface preparation

50°F/10°C	96 hours
70°F/21°C	48 hours
90°F/33°C	24 hours

Durastone 550 floors can be returned to service within 24 hours @ 70°F/21°C.

CLEANUP

Clean tools and equipment before material dries and sets with xylene, xylol or acetone

LIMITATIONS

- Do not apply to wet or damp substrates.
- Exposure of mixed material to excessive heat may cause premature gelling and significantly reduce working time.
- Do not apply Durastone 550 if temperature is below 50°F./10°C. or above 92°F/34°C. Temperature at time of application must be 5° higher than the dew point. For additional data on good coating practice, consult SSPC and/or NACE.

- Avoid applying any polymer coating in direct sunlight during times of extreme heat. This can cause wrinkling, pinholes and blistering. Application should be scheduled for early morning or late afternoon when ambient and substrate temperatures are at their lowest.

- All vinyl ester resins have a minimal shelf life. Allow sufficient lead time when ordering and do not order more material than can be used within three months of date of manufacture.

STORAGE

Store factory sealed containers of unmixed material between 50°F./10°C. and 75°F./23.8°C. away from direct sunlight or sources of heat. Shelf life of properly stored material is 3 months from date of manufacture.

CAUTIONS

FLAMMABLE LIQUID: Keep away from heat or open flames. Use with adequate ventilation. May cause skin, eye and respiratory tract irritation. Do not take internally. Keep out of reach of children.

ORGANIC PEROXIDE: Keep away from all sources of heat including sunlight. Causes eye, skin and respiratory tract irritation. May cause allergic skin reaction. Do not take internally. Keep out of reach of children.

All label precautions and the MSDS must be fully understood before using this product.

This Product is Formulated and Labeled for Industrial and Commercial Use Only

FOR BEST RESULTS AND SAFEST USAGE, USER IS SPECIFICALLY DIRECTED TO CONSULT THE CURRENT MATERIAL SAFETY DATA SHEET AND PACKAGE LABEL FOR THIS PRODUCT

We warrant our products to meet our published specifications and to be free from defects in materials and workmanship to the acceptable quality levels defined in these specifications. If acceptable quality levels are not specified, the acceptable quality levels will be those normally supplied by us for the product. We make no guarantee of the results to be obtained from the use of our products. The determination as to the adaptability of any of our products to the specific needs of the Buyer is solely Buyer's prerogative and responsibility. We are glad to offer suggestions on the use of our products. Nevertheless, there are no warranties given except such expresses warranties offered in connection with the sale of a particular product. Our liability shall be limited to replacement of, or refund of an amount not to exceed the purchase price attributed to, the goods as to which such claim is made. Our selection of one of these alternatives shall be Buyer's exclusive remedy. IN NO CASE SHALL WE BE LIABLE FOR CONSEQUENTIAL OR SPECIAL DAMAGES, EVEN IF WE HAVE BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER WARRANTIES, GUARANTEES, CO-CONDITIONS AND REPRESENTATIONS, EITHER EXPRESSED OR IMPLIED, WHETHER ARISING UNDER ANY STATUTE, COMMON LAW, USAGE OR TRADE, COURSE OF DEALING OR OTHERWISE, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.