



ChemMasters

SPECIALTY CONSTRUCTION PRODUCTS

DURAGUARD 500

VINYL ESTER PRIMER

P R O D U C T D A T A

DESCRIPTION

DURAGUARD 500 is a two-component, flexible, vinyl ester primer for concrete. It provides excellent bonding and adhesion for high build, self leveling or trowel down vinyl ester coatings and toppings.

USES

- Interior or exterior, horizontal or vertical concrete or steel surfaces
- Industrial, commercial or warehousing applications
- Primary and secondary containment tanks and dikes, chroming and plating facilities, chemical processing plants and laboratories
- Steel processing and pickling plants, airline or vehicular repair bays, petrochemical refineries

ADVANTAGES

- Excellent tensile and flexural strength to withstand impact loading without loss of bond
- Superior resistance to oils, alkalis, acids and oxidizing solutions
- Withstands immersion, fumes and spills of solvents, caustics and organics
- Exceptional durability and service life at elevated temperatures

TECHNICAL DATA

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

TENSILE STRENGTH (ASTM C 307)

2800 psi (19 MPa)

FLEXURAL STRENGTH (ASTM C-580)

3200 psi (22 MPa)

TENSILE ELONGATION (ASTM D 790)-7 days 5%

GEL TIME OF 150 ML/ 0.5 CUP (0.5 CUP MASS)

50°F (10°C)	60 minutes
75°F (24°C)	35 minutes
90°F (32°C)	15 minutes

Note: See technical data sheet for selected topping or coating for chemical resistance information

APPLICATION TEMPERATURE 50°-110°F (10°-43°C)
Relative humidity must not exceed 90%.
Substrate temperature must be 5°F above dew point.

PACKAGING

DURAGUARD 500 is available in 1 gallon, 5 gallon and 30 gallon units. A unit consists of a liquid vinyl ester resin (Part A) and a liquid catalyst (Part B).

ESTIMATING GUIDE

Duraguard 500 as primer 175 Ft.²/gal (4.3 M²/L)

DIRECTIONS

SURFACE PREPARATION: This is the most critical step in any coating application. All concrete must be a minimum of 28 days old and mechanically or chemically profiled. Steel substrates must clean and free of all oils or mill coatings.

Surface to be primed must be thoroughly dry.

MIXING: Mechanically premix the Part A resin prior to adding catalyst. After mixing, add Part B catalyst and continue mixing for one minute.

Mix Ratio: The amount of Part B catalyst is dependant on the temperature of the substrate

	CATALYST PER GALLON RESIN
50°F (10°C)	4 - 5 ounces
75°F (24°C)	3 - 4 ounces
90°F (32°C)	2 - 3 ounces

APPLICATION: Apply the mixed **DURAGUARD 500** to a dry, prepared surface at a rate of 175 square feet per gallon using a short napped solvent resistant roller, brush or medium pressure spray equipment.

Do not allow primer to puddle. It is recommended that a subsequent coat of vinyl ester be applied while the primer is still tacky. If this is not possible, the following recoat times should be adhered to:



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	MAXIMUM RECOAT TIME
50°F (10°C)	8 days
75°F (24°C)	5 days
90°F (32°C)	3 days

If the above recoat times are exceeded, contact ChemMasters for surface preparation requirements prior to applying additional materials.

Potlife of mixed **DURAGUARD 500** is also dependant on temperature. Do not mix more than can be applied according to the following table.

POTLIFE	
50°F (10°C)	60 minutes
75°F (24°C)	45 minutes
90°F (32°C)	30 minutes

CLEANUP

Clean tools and equipment before material dries and sets with MEK or lacquer thinner. Do not use an acetone solvent.

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 **DURAGUARD 500** if temperature is below 50°F or above 110°F.
- 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.
- Duraguard 500 is not formulated as a stand alone material. It is not a traffic bearing coating.
- 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 at

50°-75°F (10°-24°C) temperatures away from direct sunlight and sources of heat. Temperatures in excess of 75°F (24°C) cause premature aging of the material. Shelf life of properly stored material is three 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.