



The Chemical Company

Technical Data Guide



09 96 35
Chemical Resistant
Flooring

MasterTop® TC 493

Chemical resistant, aliphatic polyurethane floor coating

FORMERLY SELBY® N300 CR

YIELD

275 – 375 ft²/gallon (6.9 - 9.4 m²/L)
All coverage rates are approximate.
Coverage rates will vary with the desired texture and the porosity of the concrete.

PACKAGING

1 gallon (3.79 L) cans
5 gallon (18.95 L) pails

COLOR

Clear and 7 standard MasterTop colors (see the BASF Performance Flooring Color Guide for more information) Custom colors are subject to minimum quantities and increased manufacturing lead times.

SHELF LIFE

1 year when properly stored.

STORAGE

Store and transport in unopened containers in a clean, dry area.
Protect from freezing.

VOC CONTENT

See MasterTop TC 493 LEED Letter

DESCRIPTION

MasterTop TC 493 is a two-component pigmented or clear, aliphatic polyurethane coating. It provides excellent abrasion resistance, chemical resistance, weather resistance, and color retention.

PRODUCT HIGHLIGHTS

- Excellent abrasion resistance to handle excessive wear
- Excellent UV resistance to retain color stability and light reflectivity
- Excellent chemical resistance for a wide range of applications
- Excellent stain resistance for easy cleaning and maintenance

APPLICATIONS

- Floors exposed to heavy traffic, weather, or harsh chemicals
- Where color and UV stability is required
- As a lock coat for Ucrete broadcast systems
- As a topcoat for MasterTop flooring systems
- Aircraft hangars
- Industrial shop floors

LOCATION

- Interior or exterior

SUBSTRATE

- Over new and existing concrete surfaces and toppings

TECHNICAL DATA

COMPOSITION

MasterTop TC 493 is a two-component aliphatic polyurethane.

TEST DATA

PROPERTY	RESULTS	TEST METHODS
Adhesion , pli	> 30	ASTM D 903
Hardness	H pencil hardness	ASTM D 3363
Salt spray , after 1,000 hours	No effect	ASTM B 117
Accelerated weathering , after 2,000 hours	No effect	ASTM D 822
Moisture-vapor transmission , perms	0.01	ASTM E 96
VOC , lbs/gal (g/L)	3.1 (374)	EPA method
Coefficient of friction		ASTM D 2047
Dry	0.74	
Wet	0.73	
Taber abrasion , g loss; CS-17 Wheel, 1,000 cycles, 1,000 g load	0.038	ASTM D 4060

Unless otherwise noted, test samples were cured 7 days at 73° F (23° C).

CHEMICAL RESISTANCE

Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the MasterTop Chemical Resistance Guide.

HOW TO APPLY

1. This coating must be installed over a MasterTop floor coating or system within the prescribed recoat window to promote maximum intercoat adhesion. If the recoat window is exceeded, the surface must be mechanically abraded and properly cleaned to create a mechanical bond between the surface and the first MasterTop TC 493 application.

MIXING

- Mix the components for this product in a 3:1 ratio (A:B) by volume.
- Properly mix each component separately before mixing together to ensure uniform consistency.
- Combine Parts A and B in a suitably sized container. Use the proper ratios of A and B; scrape the sides of the containers to ensure a complete reaction.

4. Mix properly for 3 minutes with a slow speed drill and Jiffy style mixing paddle at 350 rpms. Keep the paddle below the surface to avoid entrapping air. Do not mix by hand.

APPLICATION

- Apply the material at 275 – 375 ft²/gallon (4 – 6.5 m²/L). Allow to cure.

DRYING TIME

Approximately 24 hours
Recoat window: 12 – 24 hours
Drying times assume 70° F (21° C) and 50% relative humidity.

MAINTENANCE

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce any tendency to retain dirt. Refer to the MasterTop Cleaning and Maintenance guide for additional information.

FOR BEST PERFORMANCE

- Tailor application techniques and coverage rates to jobsite conditions.
- Rapid thermal cycling can lead to premature failure of this product.
- Do not exceed a recoat window of 24 hours. If in doubt, call your BASF representative or flooring specialist.
- Precondition this product to 70° F (21° C) for 24 hours before using.
- In-service temperature range is 0 to 170° F (-18 – 76° C).
- Use an effective moisture barrier for substrates on or below grade; if not present, contact your flooring specialist for options.
- Install this product at a substrate temperature of 50 to 85° F (10 to 30° C).
- The architect and owner should address joint details with the contractor before the job starts.
- Do not expose MasterTop TC 493 to any chemicals until fully cured (7 days).

- BASF representatives and flooring specialists are available to assist you in the selection of the proper coating system. Call 1-800-243-6739 for in-house and field technical assistance.
- Make certain the most current versions of product data sheet and SDS are being used; visit www.master-builders-solutions.BASF.us to verify the most current versions.
- Proper application is the responsibility of the user. Field visits by BASF personnel are for the purpose of making technical recommendations only and not for supervising or providing quality control on the jobsite.

HEALTH, SAFETY AND ENVIRONMENTAL

Health, Safety and Environmental Read, understand and follow all Safety Data Sheets and product label information for this product prior to use. The SDS can be obtained by visiting www.master-builders-solutions.basf.us, e-mailing your request to basfbscst@basf.com or calling 1(800)433-9517. Use only as directed. **For medical emergencies only, call ChemTrec 1(800)424-9300.**

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