

# MasterTop<sup>®</sup> TC 693

Aliphatic polyaspartic flooring top coat

## PACKAGING

PART A CLEAR:

-5 gallons (18.93 L) in 6 gallon pails

PART A LIGHT TINT BASE

-5 gallons (18.93 L) in 6 gallon pails

PART A TINT BASE:

-5 gallons (18.93 L) in 6 gallon pails

PART B:

-5 gallon (18.93 L) pails

PIGMENT PACKS:

-1 pint (0.47 L) can

## COLOR

Available in a wide range of standard colors (see BASF Performance Flooring Color Portfolio for list of colors)

## YIELD

Topcoat: 150–300 ft<sup>2</sup>/gallon

Coverage rates are approximate and will vary with the desired texture of the floor and the porosity of the substrate.

## STORAGE

Keep stored in cool, dry environments and out of direct sunlight in unopened containers. Protect from freezing.

## SHELF LIFE

1 year when properly stored

## VOC CONTENT

Less than 47 g/L when mixed and applied per BASF instructions

## DESCRIPTION

MasterTop TC 693 is a two-component, aliphatic polyaspartic coatings. Both clear and tintable options are available. MasterTop TC 693 provides excellent abrasion resistance, chemical resistance, weather resistance, and color retention when used as a top coat with recommended BASF Performance Flooring systems.

## PRODUCT HIGHLIGHTS

- Cures very quickly to reduce facility downtime
- Excellent UV resistance helps retain color over time
- Resistant to a wide range of chemicals for use in many harsh environments
- Low VOC for use in all North American regions

## SUBSTRATES

- Over new and existing concrete surfaces and toppings

## APPLICATIONS

- Interior or exterior
- Floors exposed to heavy traffic, harsh chemicals, and temperature changes
- Where color and UV Stability are necessary
- As a lock coat and top coat for recommended BASF Performance Flooring systems
- Industrial floors
- Aircraft hangars

**Technical Data**

**Composition**

MasterTop TC 693 is a two component aliphatic polyaspartic polymer

**HOW TO APPLY**

**SURFACE PREPARATION**

1. Floors must be structurally sound and fully cured a minimum of 28 days. Test floor for vapor drive in accordance with ASTM D 4263, ASTM F 2170 or ASTM F 2420. If vapor drive exceeds the levels recommended by the manufacturer of the flooring system, a moisture mitigation system such as MasterTop VB 240 FS may be applied to reduce the permeance of moisture vapor to acceptable levels.
2. Repair concrete as necessary.
3. Use a commercial degreaser to clean floors of oil, grease, and other bond inhibiting materials.
4. Remove curing and parting compounds and other surface hardeners and floor coatings in accordance with the manufacturer's instructions.
5. Mechanical surface profiling is the recommended method of surface preparation for both new and existing floors. Mechanically profile the floor to CSP 3 (approximately medium grit sandpaper) as described by the International Concrete Repair Institute (Guideline #310.2). Do not use acid etching for surface preparation. Do not use any method that will fracture the concrete.
6. Apply a 25 ft<sup>2</sup> (2.32 m<sup>2</sup>) test in an inconspicuous area that meets owner's expectation for appearance, slip resistance and performance.
7. This coating must be installed over MasterTop epoxy flooring systems or Ucrete 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 MasterTop TC 693 application.

**Test Data**

| PROPERTY                         | CLEAR RESULTS | TINT BASE RESULTS | LIGHT TINT BASE RESULTS | TEST METHOD        |
|----------------------------------|---------------|-------------------|-------------------------|--------------------|
| <b>Hardness</b>                  | 94            | 97                | 98                      | ASTM D 2240        |
| <b>Taber Abrasion, mg loss</b>   | 45            | 74                | 87                      | ASTM D 4060        |
| <b>Tensile Strength, psi</b>     | 6,200         | 5,400             | 5,400                   | ASTM D 412         |
| <b>Viscosity, ps</b>             | 10-20         | 80-100            | 50-60                   |                    |
| <b>Density, g/cm<sup>3</sup></b> | 1.07 (Part A) | 1.52 (Part A)     | 1.58 (Part A)           |                    |
| <b>Elongation, %</b>             | 14            | 8                 | 8                       |                    |
| <b>Adhesion, psi</b>             | 350           | 350               | 350                     |                    |
| <b>Accelerated Weathering</b>    | Pass          | Pass              | Pass                    | ASTM G 155 / G 154 |

**Chemical Resistance:** Full chemical resistance is achieved after curing for 7 days. For resistance to a specific chemical compound, consult the BASF Chemical Resistance Guideline.

**MIXING**

1. Properly mix each component separately before mixing together to ensure uniform consistency.
2. For a tint base coating, premeasure required Part A and Part B (1:1 ratio by volume). Add full contents of 1 MasterSeal 900 color pack per gallon of Part A Tint Base directly into pail of Part A material. Scrape the sides of the containers to ensure all contents of the pigment pack have been used. Mix until pigment is fully dispersed, about 2 minutes, using a slow-speed drill and Jiffy style mixing paddle at 350 rpm.
3. Mix the components for this product in the following ratios:

| COATING          | COMPONENTS                                       | MIX RATIO  |
|------------------|--|--|
| <b>Clear</b>     | Part A Clear /<br>Part B                         | 1:1 (1 Gallon A:<br>1 Gallon B) by<br>volume or unit                         |
| <b>Tint Base</b> | Part A Tintbase /<br>Part B +<br>Pigment Pack(s) | 1:1 + 1 (1 Gallon A:<br>1 Gallon B +<br>1 Pigment Pack) by<br>volume or unit |

\* If using a full, 5-gallon kit of MasterTop TC 693 Tintbase (light or regular), five (5) MasterSeal 900 kits are required.

4. Mix components together for 2–3 minutes with a slow speed drill and Jiffy-style mixing paddle at 350 rpm. Keep the paddle below the surface to avoid entrapping air. Do not mix when relative humidity levels are below the dew point, as this will shorten the pot life significantly.
5. Do not introduce alcohol or solvents into the material at any point during application.

**APPLICATION**

1. Apply MasterTop TC 693 at a rate of 150-300 ft<sup>2</sup>/gallon using a 1/8" to 3/8" nap roller or squeegee. Coverage rates will range depending upon the surface profile and texture of substrate.
2. Back roll and cross roll the material to ensure application uniformity.
3. If an additional coat is needed, recoating can begin as soon as 1–2 hours after initial application. Cooler temperatures will extend the time at which the product can be recoated. Apply the second coat at a rate of 250–350 ft<sup>2</sup>/gallon. The maximum recoat window to apply an additional coat is 48 hours.
4. Allow to cure before putting back into service. Foot traffic is generally acceptable after 2–4 hours under normal conditions. Vehicular traffic is generally acceptable after a minimum of 24 hours under normal conditions (normal conditions assume 70° F and 50% relative humidity).

**MAINTENANCE**

Regular cleaning and maintenance will prolong the life of all polymer flooring systems, enhance their appearance, and reduce tendency to retain dirt.

#### FOR BEST PERFORMANCE:

- Tailor application techniques and coverage rates to job site conditions.
- Do not exceed a recoat window of 48 hours. If in doubt, contact your BASF representative or flooring specialist.
- Precondition this product to 70° F (21°C) for 24 hours before using.
- Use an effective moisture barrier for substrates on or below grade; if not present, contact your BASF representative for options.
- Install this product on a substrate temperature at 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 693 to any chemicals until fully cured (approximately 4 days).
- Boxing batches is recommended to ensure color consistency.
- Make certain the most current versions of product data sheet and SDS are being used; Consult the BASF website at [www.buildingsystems.basf.com/performanceflooring](http://www.buildingsystems.basf.com/performanceflooring) to verify the most current version.
- 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

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.buildingsolutions.basf.com](http://www.buildingsolutions.basf.com), e-mailing your request to [basfbscst@basf.com](mailto:basfbscst@basf.com) or calling 1(800)433-9517. Use only as directed.

**For medical emergencies only, call ChemTrec® 1(800)424-9300.**

#### LIMITED WARRANTY NOTICE

BASF warrants this product to be free from manufacturing defects and to meet the technical properties on the current Technical Data Guide, if used as directed within shelf life. Satisfactory results depend not only on quality products but also upon many factors beyond our control. BASF MAKES NO OTHER WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO ITS PRODUCTS. The sole and exclusive 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 sole option of BASF. Any claims concerning this product must be received in writing within one (1) year from the date of shipment and any claims not presented within that period are waived by Purchaser. BASF WILL NOT BE RESPONSIBLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFITS) OR PUNITIVE DAMAGES OF ANY KIND.

Purchaser must determine the suitability of the products for the intended use and assumes all risks and liabilities in connection therewith. This information and all further technical advice are based on BASF's present knowledge and experience. However, BASF assumes no liability for providing such information and advice including the extent to which such information and advice may relate to existing third party intellectual property rights, especially patent rights, nor shall any legal relationship be created by or arise from the provision of such information and advice. BASF reserves the right to make any changes according to technological progress or further developments. The Purchaser of the Product(s) must test the product(s) for suitability for the intended application and purpose before proceeding with a full application of the product(s). Performance of the product described herein should be verified by testing and carried out by qualified experts.