



# TC One

## Technical Data Sheet

### Product Description

**TC One** is a two component polyaspartic. It is supplied clear and is available in 3 different curing speeds: **TC One**, **TC One RedLine** and **TC One BlueLine**. It is also available in a satin finish – **TC One Satin**.

**TC One** can be used as a 3 coat, rapid cure decorative chip flooring system that is able to be installed in one day. Used for each step - primecoat, broadcast coat, and finish coat - **TC One** provides a high gloss finish, outstanding wear protection, and excellent adhesion.

**TC One** can also be used as a stand alone thin film, or finish coat for decorative systems.

### Features and Benefits

**Non-yellowing:** Provides unsurpassed gloss and color stability

**Rapid Cure:** Provides quick turnaround to minimize downtime

**Durable:** Provides excellent resistance to mechanical wear and continual cleanup

**Sanitary:** Seamless, non-porous finish results in easy cleanup

**Stain Resistant:** Provides resistance to a variety of chemicals and cleaners. Consult your installer for specific recommendations.

**Chemical Resistant:** Provides resistance to a variety of chemicals. Consult your installer for specific recommendations.

### Application Temperature Guidelines

The surface temperature must be at least 5° above the dew point to prevent moisture condensation.

TC One BlueLine	70°F-100°F
TC One	50°F-90°F
TC One RedLine	20°F-80°F
TC One Satin	50°F-90°F

### Application Overview

#### Environment

Apply when air, surface, and material temperatures are in the recommended range for TC One version being applied. The substrate temperature must be at least 5° above the dew point to prevent moisture condensation.

#### Substrate

The concrete must be structurally sound and free of oil, grease, and other contaminants. The concrete must be prepared to a surface profile of CSP 2 to 3 by diamond grinding or light shot blasting

#### Mixing

Part “A” should be mechanically pre-mixed for 60 seconds before adding Part “B”. After adding Parts “A” and “B” together, mix for 90 seconds. Do not hand mix.

#### Application

When applied as the prime coat or chip coat, TC One is typically rolled at the appropriate coverage. When used as the finish coat over chips, it can be squeegeed and back rolled, or simply applied with a roller. If squeegeed, TC One is best applied with a short, thin, flexible squeegee. See application instructions for specific coverage guidelines.

#### Rolling

Using a 3/8” nap non-shedding roller, roll the product in both directions to ensure even coverage.

#### Recoating

If additional coats are desired, they must be applied within 6 hours, or the cured material must be sanded before application.

**Please refer to Application Instructions for complete application details. Information here is summarized and is to be used only as a guideline.**

### Recommended Uses

- Rapid Cure TerraChip® System
- Finish coat for TerraQuartz® System
- Finish coat for TerraTono® System
- Stand-alone thin film system

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## Product Limitations

### Rising Temperatures

Concrete will outgas during periods of rising temperatures. To prevent bubbling, always apply when the application and cure temperatures will be constant or decreasing.

### Cracks

Moving cracks in the substrate are likely to transfer to the coating unless treated properly.

### Moisture

All concrete surfaces should be tested for moisture before applying a seamless coating. Water vapor transmission upwards through on-grade (or below grade) concrete slabs may result in system failure. If moisture emissions exceed 3 lbs./1000 sq. ft./24 hours, use of TerraPrime MM may be required prior to application of the coating system. Contact the manufacturer before application.

## Safety

This product is intended to be installed by experienced professionals. Read the SDS and product label for complete safety information before using. Avoid contact with all materials to prevent irritation. Use only with adequate ventilation.

Safety glasses, gloves, respirators, and protective clothing should be worn at all times while handling this product. Avoid exposure to eyes and skin as isocyanate resins and amine hardeners can cause mild to severe skin irritation.

## Maintenance

Do not wash the floor within 5 days of installation. Exposure to water before the floor is completely cured may dull the finish. Damp mop as needed clean, warm water and a mild detergent or degreaser. Rinse thoroughly to avoid leaving residue. When using a new cleaner for the first time, test clean an inconspicuous area to ensure compatibility with the floor.

## Storage

Store material in a cool, dry location away from flames. When stored properly, the shelf life will be a minimum of 1 year.

## Warranty

American Industrial warrants its products to be free of defects in material and workmanship. This warranty specifically excludes the following: problems due to irregularities in the substrate, failures caused by moisture migration through the substrate, changes in color and gloss. Claims must be made within 12 months of installation of material.

## Physical Properties

<b>Components</b>		2
<b>Mix Ratio (A:B)</b>		1:1
<b>Solids</b>		70%
<b>Packaging</b>	10 gallon kit	5 gal A/5 gal B
<b>Coverage</b>		
Chip System	Prime Coat	400 sq. ft./gallon
	Broadcast Coat	400 sq. ft./gallon
	Over TerraChips	200 sq. ft./gallon
	Thin film coat or finish coat	300-400 sq.ft./gallon
<b>Viscosity (mixed)</b>		
	Standard	150 cps
	Redline	150 cps
	Blueline	150 cps
	Satin	250 cps
<b>Pot Life (1 gallon @ 70°F)</b>		
	All Versions	30 minutes
<b>Working Time (72°F)</b>		
	Standard	20 minutes
	Redline	15 minutes
	Blueline	25 minutes
	Satin	20 minutes
<b>Cure Time</b>		
		1-2 hours (foot traffic)
		24 hours (full service)
<b>Flash Point</b>		
	All versions	Part A: >115°F
		Part B: >115°F
<b>Shelf Life</b>		12 months
<b>USDA: Food and Beverage</b>		Meets requirements.

## Performance Properties

<b>Adhesion</b> (ASTM D-4541)	>450 psi (concrete fails)
<b>Impact Resistance</b> (ASTM D-2794)	80/40 in-lbs
<b>Abrasion Resistance</b> (ASTM D-4060)	12 mgs. cs-17 wheels, 1000 grams, 1000 cycles
<b>Flexibility</b> (ASTM-D522)	passes
<b>Maximum Service Temperature</b>	200°F

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