

**BUILDING TRUST** 

# PRODUCT DATA SHEET

# Sikafloor<sup>®</sup> TC 421

(formerly MTop TC 421)

# HIGH SOLIDS URETHANE TOP COAT FOR SIKAFLOOR FLOORING SYSTEMS

## **PRODUCT DESCRIPTION**

Sikafloor<sup>®</sup> TC 421 is a clear, high solids, moisture cured, ultra high wear urethane top coat for Sikafloor<sup>®</sup> coating systems. Improved abrasion and slip resistance can be achieved with aluminum oxide. Satin finish is also achieved by the addition of aluminum oxide.

#### USES

- As a topcoat for Sikafloor<sup>®</sup> flooring systems
- Hangar floor
- Automotive Manufacturing
- Mechanical Room
- Assembly / Production
- Packaging
- Clean room / Lab
- Floors exposed to heavy traffic, or harsh chemicals
- Industrial shop floors

# **CHARACTERISTICS / ADVANTAGES**

- Environmentally and user-friendly
- Last twice as long as standard urethanes; up to four times as long as standard epoxies
- UV stable
- Resists Skydrol<sup>®</sup>, jet fuels and other industrial chemicals

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 October 2024, Version 01.01

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# **PRODUCT INFORMATION**

Packaging	1.5 Gallon Kit		
	Part A	<u>1</u> Gallon	
	Part B	1 Quart	
	Part C *optional 3 Pounds		
Shelf Life	1 year when properly stored		
Storage Conditions	Store and transport in unopened containers in a clean, dry area. Protect from freezing within 65 °F (18 °C) and 90°C (32 °C).		
TECHNICAL INFORMATIO	N		
Shore Hardness	König Hardness - 3 mil (76.2 micron) film, resin only		
	171.3		(ASTM D 4366)
Abrasion Resistance	18 mg loss, CS-17 Taber Abrasion Wheel, 1000 gram load, 1000(ASTM 4060revolutions4060		
Dry film thickness	3.0 mils (76.2 microns) 1 coat		
Tensile Strength	6,250 psi (43.09 MPa) (ASTM D 2370 Resin Only		
Elongation	6% (ASTM D 2370 Resin Only		
Resistance to fire	182 mm/min		(ASTM D 903)
Chemical Resistance	Please consult Sikafloor Technical Services		
UV Exposure	<10 increase of yellow units (CIE Lab Δb) if pigmented topcoat (ASTM G As measured using ASTM D2244 after 1000 consecutive hours UV 154) exposure in QUV		
Coefficient of Friction	Dry Wet	0.63 0.94	(ASTM D 2047)
Water Absorption	0.2% weight increase, 24 hour immersion		(ASTM C 413)

# **BASIS OF PRODUCT DATA**

Results may differ based upon statistical variations depending upon mixing methods and equipment, temperature, application methods, test methods, actual site conditions and curing conditions.

## LIMITATIONS

#### FOR BEST PERFORMANCE

- Do not exceed a recoat window of 18 24 hours. If in doubt, call your Sika Flooring representative or Sika Flooring Technical Service.
- Precondition this product to 70 °F (21 °C) for 24 hours before using.
- In-service temperature range is 0 to 170 °F (-18 76

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#### °C).

- Install this product at a substrate temperature of 65 to 90 °F (18 to 32 °C).
- The architect and owner should address joint details with the contractor before the job starts.
- Do not expose Sikafloor<sup>®</sup> TC 421 to any chemicals until fully cured (7 days minimum).
- Make certain the most current versions of product data sheet and SDS are being used.

## **ENVIRONMENTAL, HEALTH AND SAFETY**

For further information and advice regarding transportation, handling, storage and disposal of chemical products, user should refer to the actual Safety Data Sheets containing physical, environmental,

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toxicological and other safety related data. User must read the current actual Safety Data Sheets before using any products. In case of an emergency, call CHEMTREC at 1-800-424-9300, International 703-527-3887.

# **APPLICATION INSTRUCTIONS**

#### PRELIMINARY FLOOR INSPECTIONS

- CHECK THE TEMPERATURE AND HUMIDITY: Floor temperature and materials should be between 65 °F (18 °C) and 90 °F (32 °C). Humidity must be less than 80%. DO NOT coat unless floor temperature is more than five degrees over the current, local dew point.
- 2. Ensure the installed Sikafloor<sup>®</sup> flooring system is within its recoat window. If the recoat window has been exceeded, thoroughly abrade with #80 grit abrasives and solvent wipe clean the floor surface to ensure a good bond with Sikafloor<sup>®</sup> TC 421.

#### MIXING

- 1. Premix part A for 3 minutes using a Jiffy<sup>®</sup> mixer blade with slow speed drill. Potlife: Mix only enough material which can be used in a two hour period. NOTE: Part A is moisture sensitive. Any unused product should be resealed and used as soon as possible.
- 2. For a pigmented system, add 1 quart of Sikafloor<sup>®</sup> Urethane Pigment Pack to the Part A prior to adding the Part B. **Do not utilize Pale Green, Traffic Blue or Silver Gray pigment packs.**
- 3. For satin finish, pour Part C into Part A while mixing. Continue to mix and add Part B. Mix for 3 minutes using a Jiffy<sup>®</sup> mixer blade and slow speed drill. Pour into application tray.

#### APPLICATION

- 1. Apply Sikafloor® TC 421 at the rate of 500 ft²/gallon (46.45 m²/3.78 liters) with a 3/8" nap roller. For proper appearance and development of physical properties, it is crucial that material is not applied above or below this rate. Dip the roller in the coating and lightly roll out excess in the application tray. Apply two 8–10 foot (2.4–3.0 meters) long paths on the floor, making one stroke left to right and one right to left. Reload the roller and apply two more paths adjacent to the first pair. Reload roller and apply a third pair adjacent to the second.
- 2. Spread the material evenly with V-shaped cross passes. Make sure the floor has just enough coating to cover evenly. Excess material could cause the floor to blister, especially in high humidity. Insufficient material will cause the floor to look non-uniform
- 3. Level the area with straight passes to the perpendicular to the initial application. This will reduce the appearance of roller marks.
- 4. Agitate the material in the tray occasionally to limit settling of the Part C.

#### DRYING TIME

Allow coating to dry 24 hours at 75 °F (24 °C), 50% relative humidity before opening to light traffic. Allow more time at low temperatures, low humidity or for heavier traffic. Full properties develop after 14 days.

# **OTHER RESTRICTIONS**

See Legal Disclaimer.

#### LEGAL DISCLAIMER

- KEEP CONTAINER TIGHTLY CLOSED
- KEEP OUT OF REACH OF CHILDREN
- NOT FOR INTERNAL CONSUMPTION
- FOR INDUSTRIAL USE ONLY
- FOR PROFESSIONAL USE ONLY

Prior to each use of any product of Sika Corporation, its subsidiaries or affiliates ("SIKA"), the user must always read and follow the warnings and instructions on the product's most current product label, Product Data Sheet and Safety Data Sheet which are available at usa.sika.com or by calling SIKA's Technical Service Department at 1-800-933-7452. Nothing contained in any SIKA literature or materials relieves the user of the obligation to read and follow the warnings and instructions for each SIKA product as set forth in the current product label, Product Data Sheet and Safety Data Sheet prior to use of the SIKA product.

SIKA warrants this product for one year from date of installation to be free from manufacturing defects and to meet the technical properties on the current Product Data Sheet if used as directed within the product's shelf life. User determines suitability of product for intended

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