

SwiftTop TC 446 | Polyaspartic Aliphatic Top Coat

Product Description

SwiftTop TC 446 is a two-component, 100% solids, V.O.C. compliant, fast-curing aliphatic polyaspartic UV-stable top coat. It offers exceptional appearance and superior resistance to abrasion, chemicals, UV exposure, and solvents, while also demonstrating excellent physical properties.

Applications

- Parking garages
- Plaza decks
- Building and restoration
- Exposed roofs
- Balconies
- Stadiums
- Mechanical rooms
- Industrial floors

Features

- Fast Cure - Quick return to service, minimizing downtime.
- Low Odour - Safe for indoor use, promoting a healthier environment.
- Durable and Seamless - Robust, moisture-resistant surface.
- Mechanical Resistance - Withstands heavy wear for long-lasting durability.
- UV Resistance - Protects against sun degradation.
- Chemical Resistance - Resists various acids, alkalis, and solvents.
- Weather and Abrasion Resistance - Maintains integrity in tough conditions.
- Strong Adhesion - Bonds effectively to hard surfaces.
- Non-Yellowing Gloss - Retains a clear, glossy finish over time.

Substrate Conditions

The substrate must be above 15°C to ensure proper adhesion and curing of the material. The temperature of the substrate should be min. 3°C above the dew point prior to application of the coating.

The surface to which **SwiftTop TC 446** is applied must be clean, dry, and free from oil, grease, and any other substances that may impair adhesion. Ensure that application occurs within the recoat intervals of the existing coating.

Curing Details

Substrate Temp.	Foot Traffic	Light Traffic	Full Cure
10°C	2 days	5 days	8 days
20°C	2 days	3 days	5 days
30°C	18 hours	2 days	5 days

Typical Properties

Attribute	Test	Results
Tensile Strength	ASTM D638	> 48 MPa (7000 psi)
Elongation At Break	ASTM D638	100 - 110%
Tear Strength	ASTM D2240	61 N/mm (350 Pli)
Water Absorption	ASTM D570	0.2%
Hardness, Shore D	ASTM D2240	75 - 78
Pull Adhesion on Concrete (With Primer)	ASTM D4541	3.5 MPa (>500 psi) Substrate Failure
Taber Abrasion Resistance (CS-17 Wheel, 2.2 lbs) / 1000 Cycles	ASTM D4060	30 mg Loss
VOC		28 g/L

* Note: This data is based on laboratory tests, application conditions and methods may affect these values.

Liquid Component Properties (Mixed)

Attribute	Results
Solid Content	100%
Viscosity @ 25°C (77°F)	300 - 400 cps
Specific Gravity @ 25°C (77°F)	1.05 - 1.10
Pot Life @ 25°C (77°F)	40 - 50 minutes
Cure Time @ 20°C (68°F)	48 hours
Mix Ratio (By Weight)	1 : 1.07
Mix Ratio (By Volume)	1 : 1
Storage Temperature	10-32°C (50-90°F)

Recoat Window

Substrate Temperature	Minimum Time	Maximum Time
10°C	20 hours	36 hours
20°C	5 hours	8 hours
30°C	3 hours	6 hours

Mixing

Materials should be pre-conditioned to a minimum of 15°C (50°F) prior to use. Thoroughly mix each component separately using paddle mixers and a drill for at least 2 minutes to ensure even suspension of the solids. Pour Component B into Component A, maintaining the proper mixing ratio of 1A:1B by volume. Mix both components for a minimum of 3 minutes using a drill at a low speed (300 to 450 RPM). Keep the mixing paddle submerged throughout to avoid trapping air in the mixture. Be sure to scrape down the sides and bottom of the mixing vessel, then mix again for an additional two (2) minutes. Only prepare the quantity that can be applied within the pot life of the mixture.

***Note: The product has a very short working time of 20 ± 5 minutes. Once mixed, pour the coating onto the surface and apply immediately.**

Application

Apply the mixed product to the prepared surface in a thin film using a rubber rake, then pass a roller over it to achieve a uniform coating. Avoid creating puddles during application. For detailed information about application, please obtain a copy of the "Application Guide" from your Elastochem representative.

Cleaning

Clean all application equipment with xylene. Once the material hardens, it can only be removed mechanically. If the product splatters, wash thoroughly with hot, soapy water.

Coverage

SwiftTop TC 446 is applied at a coverage rate of 150 sq. ft. per gallon, this corresponds to a dry film thickness (DFT) of approximately 0.25 mm (10 mils). Adjust to wastage based on the area and site conditions.

***Note: The indicated mileage is calculated for flat surfaces. A porous or imperfect surface will require more material in order to cover the same surface area.**

Packaging

SwiftTop TC 446 is available in a 2 gallon (7.5 L) package and a 4 gallon (15 L) package.

Storage & Shelf Life

12 months if stored in original unopened factory-sealed containers. Keep away from extreme cold, heat, and moisture. Protect from direct sunlight and fire hazards.

Health and Safety

Users must review the most recent Safety Data Sheets (SDS) before using any products. The SDS includes essential information and guidance on the safe handling, storage, and disposal of chemical products, along with physical, ecological, toxicological, and other safety-related data.

Conditions and Limitations

- Substrate temperature should be between 15°C-30°C (59°F-86°F).
- Maximum relative humidity during application and curing should be 85%.
- Substrate moisture must be < 5% when the coating is applied.
- Do not apply on porous surfaces where humidity transfer may occur during application.
- Protect from humidity, condensation, and contact with water during the initial 24-hour curing period.

Disclaimer

The information provided, particularly regarding the application and end use of Elastochem products, is given in good faith based on the company's current knowledge and experience when the products are properly stored, handled, and applied under normal conditions in accordance with Elastochem's recommendations.

Due to the variability in materials, substrates, and actual site conditions, no warranty regarding merchantability or fitness for a particular purpose, nor any liability arising from any legal relationship, can be inferred from this information, recommendations, or any other advice provided.

Users are not relieved of the responsibility to conduct their own testing of the products for the intended application and purpose. Proprietary rights of third parties must be respected. All orders are accepted subject to our current terms of sale and delivery. Users should always refer to the most recent version of the product data sheet for the specific product, which can be obtained upon request or downloaded from our website at - www.elastochem.com



Elastochem Specialty Chemicals Inc.

37 Easton Road Brantford, ON N3P 1J4
1-877-787-2436 www.elastochem.com

