

TD.826 – TECHNICAL DATA: HERMETIC™ 2.2T CEMENTITIOUS URETHANE TOPCOAT

Revised: 5.14.20

Product Name: HERMETIC™ 2.2T

Description:

Hermetic™ 2.2T is a 100% solids, three component, cementitious urethane topcoat, specifically designed for top coating HERMETIC™ 4.8S and HERMETIC™ 7.9M thermal shock resistant overlays. HERMETIC™ 2.2T is a fast setting thermal shock resistant topcoat offering resistance to food, beverage, and food processing chemicals when compared to traditional topcoats.

Features:

- Excellent chemical and stain resistance
- Water based; VOC compliant (Zero VOC)
- Passes ADA recommendations, meets USDA, FDA, OSHA, and CFIA standards
- Fast-curing, one-step installation
- Will not support bacterial growth
- Resistant to forced hot steam over 230°F/110°C
- Can be applied down to 35°F/2°C (no moisture/ice in or on substrate)
- Service temperature -100°F/-173°C to 230°F/110°C
- No odor
- CA 01350 indoor air quality compliant
- Does not contain phthalates

<u>Property</u>	<u>Physical Properties</u>	
	<u>Test Standard</u>	<u>Result</u>
Mix Ratio		pre-engineered 3 component kit
Gel Time	1 gallon @ 70°F/21°C	20 minutes
Consistency		squeegee applied /back roll topcoat
Compressive Strength	ASTM C-579	8,000 psi
Shore D hardness	ASTM D-2240	75-80
Adhesion	ASTM D-4541	>400 psi (100% concrete failure)
Tensile strength	ASTM C-307	1,200 psi
Flexural Strength	ASTM C-580	2,500 psi
Impact resistance	ASTM D-2794	PASS
Abrasion Resistance	ASTM D-4060	35 mg lost
Thermal Shock Resistance	MIL F-52505	no cracking or loss of adhesion
Service temperature		-10°F/-23°C to 230°F/110°C forced steam
VOC Content		0 g/l
Coefficient of friction		
Standard slip-resistant	ASTM D-2047	>0.6 passes ADA recommendations
Indoor Air Quality	CA 01350	Compliant

Stocked colors: Light gray, medium gray, dark gray, tile red, black, tan, white
 Custom colors available on request.

Coverage: 90-110 sq. ft per gallon

Cure Schedule: (70°F / 21°C) Full Cure: 3-5 days

- Working Time: 20 minutes @ 70° F/ 21°C (less at higher temperatures)
- Foot Traffic: 5-7 hours (depending upon substrate temperature)
- Wheeled Traffic: 8-10 hours
- Thermal shock resistance: 48 hours

Chemical Resistance

1 = no effect with clean up and wash down within 48 hours,
 2 = clean up and wash down within 24 hours,
 3 = clean up and wash down within 1 hour
 4 = Not recommended

Acetone	3
Acetic Acid 1-10%	2
Acetic Acid 11-25%	3
Alcohol: (beer, wine, whisky, white spirits)	2
Ammonium Chloride 1-40%	2
Ammonium Hydroxide 1-10%	1
Ammonium Hydroxide 11-50%	2
Ammonium Sulphate 1-10%	1
Ammonium Hydroxide 11-50%	2
Brine (saturated)	1
Citric Acid 35%	1
Citric Acid 50%	2
Diesel Fuel	1
Diesel Oil	1
Ethylene Glycol	1
Fats, Oils Sugars	1
Formic Acid 1-20%	1
Formic Acid 21-50%	2
Gasoline, Jet Fuels (JP-4, 6), kerosene	1
Grape Juice	1
Hydraulic Oils	1
Hydrochloric Acid 1-10%	1
Hydrochloric Acid 11-20%	2
Hydrochloric Acid 21-37%	3
Hydrogen Peroxide 1-20%	1
Isopropyl Alcohol	1
Lactic Acid 1-10% (milk)	1
Lactic Acid 11-20%	2
Methyl ethyl ketone	3
Mineral Oil	1
Motor Oil	1
Nitric Acid 1-5%	3
Nitric Acid 6% -70%	4
Potassium Hydroxide 50%	1
Sulfuric Acid 1-5%	2
Turpentine	1
Toluene	3
Xylene	3

Some chemicals may cause discoloration in the flooring without affecting the performance or physical properties of the system. Test for suitability before use.

Packaging and Storage: Hermetic™ 2.2T kit size

- Part A: 2 gallons/ 7.6 L
- Part B: 2 gallons/ 7.6 L
- Part C: 18.36 lb./ 8.4 kg plastic lined bag of cement mixture

This product has been engineered to meet demanding standards.

- Only mix whole complete kits to assure the performance criteria in this data sheet.
- Do not use partial kits or try to break down the kit as the performance will be compromised.
- Do not allow this product to freeze. Store in a dry environment between 50°F/10°C to 85°F/29°C.
- Shelf Life: 6 months

Mixing & Application:

- Using a mud paddle and ½ HP electric drill in 6-gallon Elite Crete Systems mixing container, pour in Part A and Part B, and add in pigment pack (sold separately).
- Mix for 10-15 seconds and immediately add Part C. Mix until completely wetted out, usually one minute of continuous mixing after all powder has been poured into the binder.
- Immediately pour the mixed slurry onto the prepared substrate spread with a squeegee and finish with a 3/8" thick nap roller.

Limitations:

- Exposure to ultraviolet light will change the color of Elite Crete Systems urethane slurry. Sunlight and metal halide lighting will cause yellowing without affecting the performance.
- As an option, a coat of AUS-V™ pigmented top coat can be applied to prevent ambering. Contact your local Elite Crete Systems representative for consultation.