

TD.471 – TECHNICAL DATA: E100-UV1™ Clear Epoxy

Revised: 11/7/2023 Version: 1.8

Product Class: A high-build or thin, clear epoxy floor coating for commercial and industrial traffic use.

Description: E100-UV1™ Clear Epoxy is a 100% solids, medium viscosity, water clear, non-shrink, two-component epoxy coating, designed for a wide variety of applications. E100-UV1™ Clear Epoxy will not blush or water spot and has excellent physical and chemical resistant properties.

Typical Uses:

- General sealing and protection of interior concrete floors.
- As a clear protective coating for interior flooring, polymer modified concrete overlays and industrial floors.
- **REFLECTOR™ Enhancer Flooring Systems:** As base coat where a vapor barrier epoxy is not required, as the pigment/color coat and as a clear top coat.
- **HERMETIC™ Neat Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Flake Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Color Quartz Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Stout Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment and as a clear top coat.
- **HERMETIC™ Paramount Floor:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment, slurry binder and as a clear top coat.
- **HERMETIC™ Paramount Heavy Duty:** As base coat where a vapor barrier epoxy is not required, pigmented coat using special powdered pigment, trowel mix binder and as a clear top coat.

Key Features:

- Low to no odor
- 100% solids (0% VOC)
- Self-leveling and air releasing
- Antimicrobial
- Fast cure rate
- Excellent strength properties
- Excellent impact resistance
- USDA and CFIA compliant
- Easily pigmented in the field with special pigments
- Convenient 2 to 1 ratio by volume

Limitations:

- Not for use on exterior concrete
- Requires a vapor barrier epoxy in some instances to protect from vapor emission or moisture concerns.
- Subject to UV degradation when exposed to direct sunlight for long period of time (See E100-VR1™ for substitute).
- Not recommended for surfaces subject to continuous water submersion.

Product Properties: Material and curing conditions at 75° F / 24° C unless noted, 50% R.H.

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|-----------------------------|-------------------------------|
| | <u>Standard Cure</u> |
| • Color: Clear | • Tack free: 6 to 8 hours |
| • Viscosity @ 75° F / 24° C | • Foot traffic: 8 to 12 hours |
| ○ Part A: 800 cps | • All traffic: + 12 hours |
| ○ Part B: 200 cps | • Consistency: Self-leveling |
| ○ Mixed: 600 cps | |
| • Pot Life: 20 minutes | |

Physical Properties

@75° F / 24° C, 7-day ambient cure, 50% R.H.

Compressive strength	ASTM D695	13,400 psi
Tensile strength	ASTM D638	4,200 psi
Elongation at break	ASTM D638	8.2%
Flexural strength	ASTM D790	6,400 psi
Abrasion resistance		
CS-17 Wheel, 1 kg load	ASTM 4060	24 mg loss
Water absorption (2-hour boil)	ASTM D570	0.09%
Shore D hardness	ASTM D2240	85 (7 days)
Heat distortion temperature	ASTM D648	120° F / 49° C
Volatile organic content (VOC)		0 g/L
Slant shear	ASTM C882	100% concrete failure
Reaction to fire	EN 13501-1	B _{FL} – s1

Testing results are not based on the use of the product as a complete finish.

**Chemical Resistance
Splash & Spill Applications****Water (fresh and Salt)**
1%-50% Sodium Hydroxide
1%-10% Sulfuric Acid
1%-10% HCL**Butanol**
Xylene
111 Trichloroethane
Skydrol Fluids

See TD.400 for complete list.

Coverage:

- Based on the versatility and areas of use that E100-UV1™ is used, coverage varies based on the "system" it is being used in. Contact an Elite Crete Systems Technical Office for recommendations.

Available Packaging:

- 3, 15, and 150 gallon kit

Cautions, Clean Up, and First Aid:

- Although E100-UV1™ has little or no odor and carriers zero VOC, it should only be used with adequate ventilation. Avoid contact with eyes and skin. DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN. Ensure fresh air entry during application. If you experience watering eyes, headaches, or dizziness or if air monitoring demonstrates vapor levels are above applicable limits, wear a properly fitted respirator (NIOSH/MSHA TC 23C approved) during and after application. Follow respirator manufacturer's directions for use. E100-UV1™ is an irritant which can develop redness of skin and allergic reaction. Always use protective clothing, gloves and eye wear.
- Refer to SDS.443 for additional information before use.

Additional Notes:

- See document: *TD.200 – Resinous Flooring Guidelines* for information pertaining to rising damp, vapor transmission, and applicable recommended testing methods prior to use.
- Preconditioning 100% solid epoxy resins - When exposed to prolonged periods of cold temperature, epoxy resins typically thicken, may crystallize and become harder to flow or spread. To improve the product flow-ability maintain temperature at about 70° F / 21° C before mixing. Crystallized epoxy can be reconstituted at 90° F / 32° C for 12 hours and remixed.

Suggested Storage:

- Store in a temperature and weather-controlled area between 65° F / 18° C and 85° F / 29° C.
- Do not allow to freeze.
- Shelf Life - 1 year from date of manufacture.