

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.

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

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 carries 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.