



UltraLok[®] Structural Epoxy Adhesive

UltraLokTM 54190

1. DESCRIPTION:

UL54190 is a two-part, mineral filled, room temperature cure, epoxy adhesive designed for the bonding of metals, ceramics, and many plastics. It cures at room temperature to a tough, semi-flexible material. It has good wetting to most surfaces and is free flowing to penetrate cavities and give good self-leveling and air release. Because it is a filled epoxy, it gives very good vibration and impact resistance. It gives good resistance to water, salt spray, inorganic acids and bases and most organic solvents.

It was especially formulated to a 1 Part A to 1 Part B volume ratio mix for use in side by side cartridges and meter mix equipment. UL54190 can reach handling cure at room temperature within 16 to 20 hours, but it can be accelerated by the use of heat. Times and temperatures from 2 hours at 65°C to 20 minutes at 100°C are typical for many applications. The time to heat the substrate must also be taken into consideration. Cooler temperatures will also extend work time and cure time.

2. CHARACTERISTICS:

Room Temperature Cure Properties

Work Time:	60 minutes (at 75°F/ 24°C)
Fixture Time:	10 hours (at 75°F/ 24°C)
Full Cure:	10 hour movement; 24 hours for full properties
Operating Temp.	-40°F(40°C) to 266°F (130°C)
Mixed Density:	9.5 lbs/gal (1.15 g/cc)
Flash Point:	Greater than 200°C (392°F)
Viscosity:	Resin (Part A) 80,000 CPS Hard (Part B) 80,000 CPS
Color:	Resin (Part A) Gray Activator (Part B) Opaque Mixed: Gray
Mix Ratio:	1 Part A to 1 Part B (1:1)
Hardness:	70 Shore D
Tensile Strength:	> 3,000 PSI (AL to AL)
T-Peel	25 pli
Elongation:	60 %
Impact Resistance:	> 150 inch/lb
Dielectric Constant:	4.5 (at 25°C, 100Hz)
Dielectric Strength:	410 v/ml
Volume Resistivity:	8 x 10 ⁻¹³ ohm-c
Water Absorption:	< 1% (24 hours)
Shelf Life:	12 Months
VOC Content:	0% by weight

3. Handling and Storage:

- Bring both components to room temperature prior to mixing. Mix 1 part A to 1 part B by volume or weight thoroughly for 30 seconds minutes.
- Dispense mixed material over properly positioned devices to be glued together. Pre-bleed side by side cartridges the first 3 inches. Allow system to be undisturbed until fixtured.
- Parts may be shipped within 24 hours but parts can be moved in 10 hours.

4. ADDITIONAL INFORMATION

NOTE: Information contained herein is based on tests we believe to be reliable and accurate. It is offered in good faith for the benefit of the consumer. The Company shall not be liable for any injury, loss, or damage in the use or handling of its chemical products since conditions and use are beyond our control. In every case, we urge and recommend the user conduct tests to determine to their own satisfaction that the product is of acceptable quality and suitability for their particular purpose under their own operating conditions. Statements concerning possible use of our products are not intended as recommendations to use our products in the infringement of any patent, or for any particular purpose or application. These products are intended for industrial use only.



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