

THERMOSET® DC-80 EPOXY ADHESIVE

Technical Data Sheet

Thermoset® DC-80 adhesive is a two-component epoxy adhesive system used in varying mix ratios to provide optimum properties.

Features and Benefits

Flexible Bond Strength: provides high bond strength for use as an adhesive to a variety of surfaces. Rigidity of bond may be varied depending on mix ratio. A 1:2 (resin to hardener, by weight) ratio will yield a relatively flexible bond; a 2:1 ratio will provide a rigid bond.

Versatile: provides excellent adhesion to a wide variety of surfaces; provides improved tensile shear and peel strength in bonding of flexible substrates.

Application

Mixing: Mix the proper amount of resin and hardener depending on desired cured properties. Thoroughly mix adhesive until uniform in color. Automatic meter/mix/dispense equipment may be used for high volume production.

Applying: Apply adhesive using handheld cartridges or automatic meter/mix/dispense equipment.

Curing: Allow adhesive to cure for 24 hours at room temperature (25°C), for 30 minutes at 93°C, or for 5 minutes at 121°C. This time-at-temperature profile refers to the time the material should be allowed to cure once it reaches the target temperature. Allowance should be made for oven ramp rates, parts with large thermal mass and other circumstances that may delay material reaching the target temperature.

Cleanup: Disposable containers and utensils are recommended when working with epoxies. However, when disposable materials are impractical, uncured adhesive can be removed by cleaning equipment with solvent. Solvent-cleaned utensils should be thoroughly dried before reuse; any remaining solvent can contaminate the next mixture.

Shelf Life/Storage

Shelf life of Thermoset DC-80 resin is six months and shelf life of Thermoset DC-80 hardener is one year when stored at 25°C in original, unopened container.

Typical Properties*

	DC-80 Resin	DC-80 Hardener	Mixed
Appearance	White Paste	Black Paste	Gray Paste
Viscosity, cP @ 25°C	1,100,000	600,000	Thixotropic Paste
Specific Gravity	1.21	1.01	–
Working Life, minutes @ 25°C	–	–	60

*Data is typical and not to be used for specification purposes.

Typical Cured Properties**

Hardness Shore D, ASTM D 2240	86
Tensile Strength, MPa (psi) ASTM D 638	52.4 (7600)
Elongation at Break, % ASTM D 638	12

**Data is typical and not to be used for specification purposes. Mixed at 100:50 by weight. Cure schedule of 16 hours @ 25°C plus one hour @ 100°C.

Cautionary Information

Before using this or any Parker Lord product, refer to the Safety Data Sheet (SDS) and label for safe use and handling instructions.

For industrial/commercial use only. Must be applied by trained personnel only. Not to be used in household applications. Not for consumer use.

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