



Technical Data Sheet

Sep. 18, 2020

C-Tough

Description: *C-Tough* is a two-part structural epoxy adhesive. The toughness and flexibility of *C-Tough* allows it to be impact and shock resistant while being able to withstand vibration, contraction and expansion. *C-Tough* has tremendous grip to wood, metal, plastics, glass, masonry and fiberglass. *C-Tough* has an easy 1:1 mixing ratio and allows for a long working time with a fast cure rate.

Physical properties:

	<i>PART A (Resin)</i>	<i>PART B (Hardener)</i>
Composition	Epoxy resin	Mixture of Polyamide and Amine compounds
Viscosity (25°C -cps)	8000-12000	14000-18000
Color	Cloudy/Light Amber	Amber
Specific Gravity @ 25°C	1.10	0.95
Mixing ratio (volume)	1	1
Mixing ratio (weight in grams)	100	85

Curing behavior:

At 25°C:

Gel Time	40-60 minutes
Cure Time (functional)	12 hours
Full Cure Time	24 hours
Mixing Color	Light Amber
Shear Strength (ISO4587)	25-32 N/mm²
Hardness (Shore D)	75-80
Gap to fill	0.1-2.1 mm

Chemical Resistance (after 24 hours from curing):

Chemical	Temperature	After 100 hours	After 500 hours
Motor oil	40°C	EX	EX
Water	25°C	EX	EX
Cooling Gas	25°C	EX	EX
Gasoline	25°C	EX	EX

Directions for use:

Part A and B need to be mixed thoroughly in the correct volume ratio for minimum one (1) minute before use. Gel time of the mixed product is 40-60 minutes at room temperature.

Parts requiring bonding should be assembled and kept close without any stress. Assembling is continued until full curing takes place.

Excess of the product can be cleaned with Acetone or any solvent-based cleaner compatible with the substrates to bond.

For best results, it is recommended to scratch (if possible) the surface, then gently degrease and clean the excess material off the area.

Note: Shear strength will increase significantly if bonding parts are allowed to cure 24 hours at 25°C(77°F) followed by 30 minutes cure at 120°C(250°F) after the initial 24 hour cure at room temperature (if possible).

Storage: Product must be kept in a cool and dry room at 10°C to 25°C.

Shelf life: Minimum two (2) years in unopened packaging at +5°C / +27°C.

Safety and handling: Consult Material Safety Data Sheet (MSDS) before use.

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