



# Product E-220IC

May 24, 2007

## PRODUCT DESCRIPTION

LOCTITE® Product **E-220IC** is single-component epoxy designed for induction cure operations. Once in contact with substrates brought to temperature, the epoxy cures rapidly at room temperature and is designed to reduce the risks of localized overheating.

Cured two hours at 180°C and cooled to room temperature for  $\geq 24$  hours. Aged at conditions for time indicated. Tested at room temperature.

Strength After Heat and Humidity – 10 Days 120°F and 100% Relative Humidity	Typical Value
Steel Lap Shear Strength, 150°C Two Weeks, psi	4121

## TYPICAL APPLICATIONS

Bonding substrates active in induction field and heat cured bonding applications.

## USE AND APPLICATION

This product is not recommended for use in pure oxygen and/or oxygen rich systems and should not be selected as a sealant for chlorine or other strong oxidizing materials.

## PROPERTIES OF UNCURED MATERIAL

	Typical Value	Range
Chemical Type	Epoxy	
Appearance	Light Gray	
Viscosity @ 25°C, mPa.s (cP)	Paste	
Specific Gravity, 25°C	1.52	
Flash Point (TCC), °C (°F)	Pending	

For safe handling information on this product, consult the Material Safety Data Sheet (MSDS).

## Storage

Store product in cool, dry location, in unopened containers at a temperature between -4°C and 28°C (26°F to 82°F) unless otherwise labeled. Optimal storage is at the lower half of this temperature range. To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact Application Engineering at (860) 571-5100.

## TYPICAL PROPERTIES OF CURED MATERIAL

### Physical Properties

Cured two hours at 180°C and tested at room temperature 24 hours later. Zero induced gap unless otherwise noted.

Room Temperature Property	Typical Value
Steel Lap Shear Strength, psi	5900
Aluminum Lap Shear Strength, psi	4600
Steel Lap Shear Strength, 10 mil induced gap, psi	5140
Zinc Galvanized Lap Shear Strength, psi	3600
Zinc Dichromate Lap Shear Strength, psi	2900
Steel to Ferrite (ceramic) Magnet Shear Strength, psi	
Impact Strength on Steel, J	>13.6

### Data Ranges

The data contained herein may be reported as a typical value and/or range. Values are based on actual test data and are verified on a periodic basis.

### Note

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Cured two hours at 180°C and cooled to room temperature for  $\geq 24$  hours. Tested at temperature indicated. Zero induced gap.

Hot Strength	Typical Value
Steel Lap Shear Strength, 150°C, psi	642
Steel Lap Shear Strength, 180°C, psi	387

Cured two hours at 180°C and cooled to room temperature for  $\geq 24$  hours. Aged at temperature for time indicated. Tested at room temperature.

Heat Aging Strength	Typical Value
Steel Lap Shear Strength, 150°C Two Weeks, psi	5900
Steel Lap Shear Strength, 180°C Two Weeks, psi	5179

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