

March 2010

PRODUCT DESCRIPTION

LOCTITE® Product E-4100 is single component epoxy that bonds well to metals, thermoset and composite materials. The single component epoxy cures at elevated temperatures.

FEATURES

- High strength
- · High impact strength
- High vibration resistance
- Excellent durability

PROPERTIES OF UNCURED MATERIAL

	Typical Value
Chemical Type	Epoxy
Appearance	Gray Paste
Viscosity	High
Specific Gravity, 25°C	1.50

CURING PROPERTIES

The product may generate excessive heat if cured in thicknesses greater than 0.25 inch at temperatures above 300°F.

Temperature (°F)	Cure Time, min
275	40
300	30
325	15
350	5

Curing large or massive assemblies may require additional time to reach the cure temperature.

LAP SHEAR STRENGTH (ASTM D-1002)

Material	Typical Value, psi
Steel / Steel	3500
Aluminum / Aluminum	4000
Stainless Steel / Stainless Steel	3000
Copper / Copper	2000*
Brass / Brass	2000*
Ferrite / Ferrite	1000*
SMC Plastic / SMC Plastic	1000*

^{*} Denotes substrate failure of the bonded joint

THERMAL RANGE

Property	Typical Value
Long Term Service, °F	-40 to 350
Intermittent Service, °F	-40 to 375

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.

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

Storage

Store product frozen, in a dry location, in unopened containers at a temperature between -20°C (-4°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.

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

The product for which the data provided herein are furnished for informational purposes only and are believed to be accurate and reliable. Nevertheless, Henkel Corporation cannot and will not assume responsibility for the results obtained by others over whose production methods we have no control. Thus, it is the user's responsibility to determine the suitability of this product for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling, storage, disposal and use thereof. In light of the foregoing, HENKEL CORPORATION SPECIFICALLY DISCLAIMS ANY AND ALL WARRANTIES EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE AND FREE FROM CLAIMS OF THIRD PARTY PATENT INFRINGEMENT, ARISING FROM THE SALE, POSSESSION, HANDLING, STORAGE, DISPOSAL, TRANSPORTATION OR USE OF THIS HENKEL CORPORATION SPECIFICALLY DISCLAIMS ANY LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES OF ANY KIND, INCLUDING LOST PROFITS. Neither the product, nor the data or discussion herein of various processes for which, are to be interpreted as an express or implied license under any Henkel Corporation patents. Henkel Corporation recommends that any and all proposed commercial application(s) using this product be evaluated for reproducibility in the exact manner and on the production equipment with which it is intended to be used before repetitive commercial production use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications of Henkel Corporation, or under which Henkel Corporation is licensed.

