

PRODUCT DESCRIPTION

LOCTITE® EA 210213 is a one-part, heat cure epoxy adhesive. This adhesive cures rapidly at temperatures as low as 100°C (212°F) while maintaining excellent stability.

TYPICAL APPLICATIONS

Bonding stainless steel cannulae into hubs for needle assemblies.

PROPERTIES OF UNCURED MATERIAL

	Typical Value	Range
Chemical Type	One-Part Epoxy	
Appearance	Light Tan	
Specific Gravity @ 25°C	1.40	
Viscosity @ 25°C, mPa.s (cP)		
Brookfield RTV		
Spindle SSA #14 @ 20 rpm	31,000	27,000 to 35,000
Flash Point (TCC), °C (°F)	>93 (>200)	
Fluorescent	No	

TYPICAL CURING PERFORMANCE

Cure Speed

Typical cure times were estimated as >99% conversion using differential scanning calorimetry.

Cure Temperature	Cure Time, Minutes
100°C	24
125°C	13
150°C	10

PERFORMANCE OF CURED MATERIAL

Needle Pull Strengths

Needle pull strengths were determined using Loctite standard test specimens. The adhesive was cured for 30 minutes at 100°C.

Needle Pull Strength Typical Value, lb (N)		
Hub Material	Cannula Gauge Size	
	22	27
ABS	68 (15)	36 (8)
PP, Plasma Treated	40 (9)	30 (7)
PE, Plasma Treated	49 (11)	32 (7)

Storage

Product should be stored refrigerated at approximately 2-8°C (35 -45°F). When using the product, it should ideally be used at ambient conditions between 8°C to 28°C (46°F to 82°F). To prevent contamination of unused product, do not return any material to its original container. For further specific shelf life information, contact your local Technical Service Center.

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 information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. The product can have a variety of different applications as well as differing application and working conditions in your environment that are beyond our control. Henkel is, therefore, not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, Resin Technology Group, Inc., or Henkel Canada, Inc. the following disclaimer is applicable:

The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability 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 and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:

In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:

The information provided in this Technical Data Sheet (TDS) including the recommendations for use and application of the product are based on our knowledge and experience of the product as at the date of this TDS. Henkel is not liable for the suitability of our product for the production processes and conditions in respect of which you use them, as well as the intended applications and results. We strongly recommend that you carry out your own prior trials to confirm such suitability of our product.

Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

Trademark usage

Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.