

**LOCTITE® PC 5070**Known as LOCTITE® 5070 or LOCTITE Pipe Repair Kit  
January 2015**PRODUCT DESCRIPTION**

LOCTITE® PC 5070 provides the following product characteristics:

<b>Technology</b>	Epoxy
<b>Appearance</b>	Yellow impregnated tape <sup>LMS</sup>
<b>Cure</b>	Room temperature cure
<b>Application</b>	Industrial maintenance
<b>Specific Benefit</b>	<ul style="list-style-type: none"><li>Minimizes lost production time due to unscheduled shutdown</li><li>Conforms to odd shapes</li><li>Great pressure retention</li><li>Pipes are back in service within an hour</li><li>Does not require special training or personnel</li><li>Superior adhesion - forms a solid bond to steel, cast iron, stainless steel, concrete, and clean and abraded bronze, copper and aluminum</li><li>Stops leaks reinforces pipe couplings</li><li>Adheres and cures under water</li><li>Can be sanded and painted as required</li></ul>

LOCTITE® PC 5070 is recommended for reliable, temporary repairs of metal, plastic and composite pipes. It includes a urethane impregnated fiberglass tape, designed to make on-site pipe repairs in just minutes without the use of tools or specially trained personnel. The urethane impregnated fiberglass tape is activated by water and applied by simply wrapping it around the damaged area. Material cures in approximately 30 minutes to a durable finish. Also included in the LOCTITE® PC 5070 is a one-use size of Loctite® EA 3463™ for filling holes and cracks prior to the application of the fiberglass tape. Used in combination, the fiberglass tape and epoxy stick provide a reliable and fast pipe repair system. Typical applications include sealing cracked castings, tanks, vessels, valves and pipes. It also repairs pipe joints and reinforces tanks, vessels, valves, joints and elbows. LOCTITE® PC 5070 should not be used on a pipeline that is carrying caustic, hazardous or otherwise harmful materials. This product is typically used in applications with an operating range of -29 °C to +121 °C.

**NOTE: Urethane impregnated fiberglass tape and LOCTITE® EA 3463™ are not approved for direct contact with potable water**

**TYPICAL PROPERTIES**

Working Time @ 25 °C, minutes	3 to 4
Cure Time @ 25 °C, minutes	30
Maximum Pressure:	
50 mm diameter pipe with 3.2 mm diameter hole	N/mm² 18.6 (psi) (2,700)

\* Pressure rating depends on type of pipe and type of damage.

\*\* Cure time is affected by the temperature of the application. Temperatures under 10 °C will result in a substantially longer cure time. Temperatures over 27 °C will result in a shorter cure time.

**TYPICAL PERFORMANCE****Physical Properties:**

Shore Hardness, ISO 868, Durometer D	84
Tensile Strength, ISO 527-2	N/mm² 41.4 (psi) (6,000)

**GENERAL INFORMATION**

**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 Safety Data Sheet (SDS).**

**Directions for use****Read thoroughly before opening package**

1. Turn off pressure in pipeline and dry the area to be repaired.
2. For best results, clean and prep the area thoroughly as follows: abrade the pipe with sandpaper or file to achieve a rough profile and clean the surface with an oil-free solvent. For maximum adhesion, the prepared area should be approximately 3 to 4 times the size of the damaged area.
3. To halt low pressure leaks or fill cracks and voids, use the Loctite® EA 3463™ epoxy stick included in the kit. The mechanical bond that is created in this step is critical to the performance of the repair system. Remove the wrapping from the Loctite® EA 3463™ then simply mix and knead the epoxy stick until it is uniform in color. Press the mixed epoxy firmly into the crack, hole or void.
4. While wearing gloves, open foil pouch and quickly activate the urethane impregnated fiberglass tape by soaking in room temperature water for 20 seconds before applying. *Please note that after pouch is opened, the tape will start to set when exposed to moisture in the atmosphere; therefore, it is important to work as quickly as possible.*

5. Apply the urethane impregnated fiberglass tape by firmly wrapping it around the pipe, overlapping itself and completely covering the damaged area. The pipe wrap covering must extend 5 to 10 cm beyond the repaired section of pipe. For a firm wrap, allow the tape to stretch or extend slightly as it is wrapped. Wrap the tape a minimum of 4 times around the pipe or build up 3-4 times the wall thickness of the pipe, whichever is greater. With gloved hands, keep working the urethane back into the tape while molding and pressing the tape until it has lost its initial tackiness.
6. The urethane impregnated fiberglass tape will be fully hardened in approximately 30 minutes, and the pipe can be returned to service within an hour.

**NOTE: LOCTITE® PC 5070 is intended as a temporary repair and cannot replace permanent pipe. Severely damaged pipelines or repaired pipes carrying harmful materials should be replaced as soon as possible.**

#### Loctite Material Specification<sup>LMS</sup>

LMS dated April 11, 2002. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

#### Storage

Store product in the unopened container in a dry location. Storage information may be indicated on the product container labeling.

**Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.** Material removed from containers may be contaminated during use. Do not return product to the original container. Henkel Corporation cannot assume responsibility for product which has been contaminated or stored under conditions other than those previously indicated. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

#### Conversions

$(^{\circ}\text{C} \times 1.8) + 32 = ^{\circ}\text{F}$   
 $\text{kV/mm} \times 25.4 = \text{V/mil}$   
 $\text{mm} / 25.4 = \text{inches}$   
 $\mu\text{m} / 25.4 = \text{mil}$   
 $\text{N} \times 0.225 = \text{lb}$   
 $\text{N/mm} \times 5.71 = \text{lb/in}$   
 $\text{N/mm}^2 \times 145 = \text{psi}$   
 $\text{MPa} \times 145 = \text{psi}$   
 $\text{N}\cdot\text{m} \times 8.851 = \text{lb}\cdot\text{in}$   
 $\text{N}\cdot\text{m} \times 0.738 = \text{lb}\cdot\text{ft}$   
 $\text{N}\cdot\text{mm} \times 0.142 = \text{oz}\cdot\text{in}$   
 $\text{mPa}\cdot\text{s} = \text{cP}$

#### 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 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, 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 Corporation, 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.

#### 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.

#### Reference 0.1