

LOCTITE® PC 5070 PRO

Known as LOCTITE® PC 5070 Pro Advanced Pipe Repair Kit
May 2024

PRODUCT DESCRIPTION

Technology	Epoxy/Rubber Tape/Urethane
Appearance	White impregnated tape
Cure	Room temperature cure after mixing
Application	Industrial maintenance
Application Temperature	10°C to 30°C (50°F to 86°F)
Operating temperature	-45°C to 121°C (-50°F to 250°F)
Specific Benefits	<ul style="list-style-type: none"> • Ready to use • No mixing or mess • Saves time • Needs no special tools • No hot work • Environmentally safe • Cures completely in minutes

LOCTITE® PC 5070 PRO is a complete emergency pipe repair kit. These kits are packaged and delivered as complete systems, enabling quick repairs for a wide range of applications on pipes up to 4 inches (10.16 cm) in diameter and up to 60 psi (4.1 bar) live leaks. Once the adhesive and wrap are cured, the max pressure is 300 psi. Typical applications include pressurized or unpressurized pipe repair on copper, steel, SS, PVC, FRP, clay, concrete, rubber and more. It has the geometric flexibility to repair joints, tees, couplings, pinholes and cracks.

TYPICAL CURING PERFORMANCE

Curing @ °C

Gel Time, ASTM D2471, minutes	3
Working life, minutes	4
Cure Time (Epoxy), minutes	10
Cure Time (Wrap), minutes	30

TYPICAL PERFORMANCE OF CURED MATERIAL

Cured for 1 week @ 23°C

Physical Properties:			
Tensile Strength, ASTM D3039	N/mm ² (psi)	250 (36,000)	
Flexural Strength, ASTM D5379	N/mm ² (psi)	180 (26,100)	
Maximum Pressure	bar (psi)	20.7 (300)	

Electrical Properties:

Dielectric Strength, ASTM D149, kV	16
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Physical Properties:

Lap Shear Strength, ASTM D5379
Mild Steel

N/mm² 6.2
(psi) (900)

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).

Surface Preparation

Proper surface preparation is critical to the long-term performance of this product. The exact requirements vary with the severity of the application, expected service life, and initial substrate conditions.

Direction for use

1. If a non-pressurized repair is to be conducted, turn off the pressure in the pipeline and dry the area to be repaired.
2. For best results, clean and prepare the area thoroughly as follows: abrade the pipe with sandpaper or wire brush to achieve a rough profile and clean the surface with an oil-free solvent, included in kit. For maximum adhesion, the prepared area should be approximately 3 to 4 times the size of the damaged or leaking area.
3. To halt low pressure leaks or fill cracks and voids, use Loctite® EA 3463 included in the kit. The mechanical bond that is created in this step is critical to the performance of the repair system. While wearing gloves, 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 to the damaged or leaking area.
4. While wearing gloves, unroll first 6 inches (15 cm) from the roll of black rubber pressure sealing tape and remove backings. Press adhesive side of black rubber pressure sealing tape onto pipe beside the damaged or leaking area. Overwrap 2 layers of tape onto itself in a clockwise direction.
5. Continue wrapping the pressure sealing tape, stretching it to its maximum tension, working toward the epoxy, thus pushing the epoxy into the damaged area. Overwrap directly over the epoxy with several layers using the entirety of the wrap. When you reach the last 6 inches (15 cm), remove the adhesive backing and without force, continue to wrap and press the adhesive onto pressure sealing tape.

6. While wearing gloves, open foil pouch and quickly activate the urethane impregnated fiberglass tape by soaking in room temperature water for 10 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.*
7. Apply the urethane impregnated fiberglass tape by firmly wrapping it around the pipe, overlapping itself and completely covering the damaged area. The fiberglass wrap covering must extend 2 inches (5 cm) beyond the repaired section of pipe and 8 layers are required. To achieve 8 layers, apply 4 clockwise passes using a 50% overlap.
8. For a firm wrap, allow the tape to stretch or extend slightly as it is wrapped. Occasionally twist the tape as it is applied to help conform tightly to the pipe. Keep molding and pressing the tape as you wrap.
9. At the end, add water to properly activate the last layers of the urethane tape.
10. Apply 4 layers of clear plastic compression film over the entire composite repair in a clockwise direction.
11. Using a perforating tool or wire brush, perforate all layers of compression film to allow the gas generated by the curing process to escape.
12. Remove compression film after approximately 10 minutes.
13. The urethane impregnated fiberglass tape will be fully hardened in approximately 30 minutes, and the pipe can be returned to service within an hour depending on temperature.

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 Henkel representative.

Product Specification

The technical data contained herein are intended as reference only and are not considered specifications for the product.

Product specifications are located on the Certificate of Analysis or please contact Henkel representative.

Approval and Certificate

Please contact a Henkel representative for related approval or certificate of this product.

Data Ranges

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

Temperature/Humidity Ranges: 23°C / 50% RH = 23±2°C / 50±5% RH

Conversions

(°C x 1.8) + 32 = °F
 kV/mm x 25.4 = V/mil
 mm / 25.4 = inches
 µm / 25.4 = mil
 N x 0.225 = lb
 N/mm x 5.71 = lb/in
 N/mm² x 145 = psi
 MPa x 145 = psi
 N·m x 8.851 = lb·in
 N·m x 0.738 = lb·ft
 N·mm x 0.142 = oz·in
 mPa·s = cP

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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.

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