

Loctite® PC 5090™

May 2016

PRODUCT DESCRIPTION

Loctite® PC 5090™ provides the following product characteristics:

Technology	Plain, biaxial peel-ply fabric
Chemical Type	Polyester
Appearance	White
Cure	Not applicable
Application	Industrial maintenance

Loctite® PC 5090™ is a technical fabric and peel ply designed to be used on epoxy resins. This standard fabric is used in direct contact with the laminate in order to compact it after the laminating process.

It is used as a peel ply after curing to handling strength. After removal, the fabric leaves a clean, fresh, and rough surface impression for bonding. There is no release agent or silicone in the fabric so there will be no contamination. Optionally the fabric can be thermoshrunk from 100°C to 200°C for up to approximately 15% shrinkage to further compact.

Loctite® PC 5090™ is used in combination with Loctite® PC 7210, an epoxy resin, and PC 5085, a carbon-glass textile, as a composite repair system to repair and protect metal pipes and tanks in the petroleum, petrochemical and natural gas industry. It can be used to repair damaged and corroded parts where high strength is required, together with corrosion protection and chemical resistance. Typical applications include sealing and repairing cracked tanks, pipes, pipe joints and reinforcing tanks, joints and elbows.

ISO 24817 - Composite Repairs for Pipework - Qualification and Design, Installation, Testing and Inspection

The standard gives requirements and recommendations for the qualification and design, installation, testing and inspection for the external application of composite repairs to corroded or damaged pipework used in the petroleum, petrochemical and natural gas industries. The composite repair system consisting of Loctite® PC 7210, Loctite® PC 5085, and Loctite® PC 5090 is certified according to ISO 24817. **Note:** Please contact your local Technical Service Center for more information and clarification.

TYPICAL PROPERTIES

This product is available in widths of 50mm and 100mm

Length, m	100
Area Weight, g/m²	86
Maximum service temperature, °C	200

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:

1. **NOTE:** Composite repairs according to ISO 24817 have to be calculated and designed by Henkel Technical Customer Service (TCS) partners. Application has to be carried out by certified applicators trained by Henkel TCS. The following text gives only a brief summary on the application process in general.
2. See Technical Data Sheet of Loctite® 7210
3. After the laminating process apply Loctite® PC 5090™ as top layer on the composite. When wrapping around a pipe or similar geometry keep the tape under tensile force to compact the composite. Otherwise use foam rollers or another suitable tool.
4. Remove excess resin.
5. After curing, to at least handling strength, remove Loctite® PC 5090™ by peeling off. If another bonding or coating process on the composite surface will be carried out, the peel-ply should be removed immediately before this step.

Not for product specifications

The technical data contained herein are intended as reference only. Please contact your local quality department for assistance and recommendations on specifications for this product.

Storage

Store product in a cool dry place away from direct sunlight and heat sources. **Optimal Storage: 8 °C to 21 °C. Storage below 8 °C or greater than 28 °C can adversely affect product properties.** Henkel Corporation cannot assume responsibility for product which has been 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

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

Reference 0.0

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.

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