Technical Data Sheet

LOCTITE® PC 9021

September 2019

PRODUCT DESCRIPTION

LOCTITE® PC 9021 provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (Resin)	Off-white liquid
Appearance (Hardener)	Red liquid
Appearance (Mixture)	Beige liquid
Components	Two part - Resin & Hardener
Mix Ratio, (by weight) Resin : Hardener	100 : 5.4
Mix Ratio, (by volume) Resin : Hardener	100 : 9.36
Cure	Room temperature cure after mixing
Application	Europe - Crusher repair products
Application Temperature	15 to 35°C (60 to 95°F)
Specific Benefit	• Easy and safe to use • High compression strength • Low odor • Minimal shrinkage • High hydrolytic stability

LOCTITE® PC 9021 is an epoxy system for backing wear metal in gyratory and cone crushers. The product eliminates the needs for traditional melting or special equipment, and has high hydrolytic stability (low water absorption). Its high volumetric stability eliminates the formation of gaps between backing and liners or support structures, allowing for fast return to service.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Resin:

Weight per volume	kg/L (lbs/gal)	1.7 to 1.8 (14.19 to 15.02)
Viscosity, Brookfield - RV,25°C,mPa·s (cP):		
Spindle 6, speed 20 rpm		25,000 to 35,000

Hardener:

Weight per volume	kg/L (lbs/gal)	1.0 to 1.02 (8.34 to 8.51)
Viscosity, Brookfield - RV, 25 °C, mPa·s (cP):		
Spindle 1, speed 50 rpm		30 to 120

Mixed:

Specific Gravity, g/cm³	1.71
Coverage	5,576 cm³ per 7.5 liter kit (340 in³ per 2 gallon kit)
Coverage	13,900 cm³ per 19 liter kit (850 in³ per 5 gallon kit)

TYPICAL CURING PERFORMANCE

Curing Properties

Gel Time @ 25 °C, minutes:	
400 g mass	30 to 60

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:

Preparation of Metallic Parts

1. If a bond to the substrate is desired, all metallic parts that come in contact with LOCTITE® PC 9021 should be free of rust, dirt, grease, and oil.
2. If easier removal of worn liners is desired, coat the appropriate surfaces with a release agent such as grease or light oil.
3. Seal all gaps, hook holds, bottom joints, and protected threaded parts of shafts where necessary.

Preparation of Backing Material

LOCTITE® PC 9021 and substrate must be between 15 to 35C (60 to 95F) before use:

- Lower temperatures give longer working life, but higher viscosity making the material hard to pour.
- High temperatures reduce LOCTITE® PC 9021 working time to pour into crusher.

Mixing:

1. Pre-mix resin approximately 1 minute.

2. Shake hardener thoroughly mixing its contents.
3. While mixing resin, add hardener contents.
4. Continue mixing until the entire contents of the pail are uniform beige color, making sure to scrape the sides and bottom of the pail thoroughly until there are no signs of off-white or red material.

Application Method:

1. Pour mixture immediately after mixing. Pour at one place and allow LOCTITE® PC 9021 to fill the cavity and push out the air in front of it. Use dam (tin, cardboard, clay, etc.) to direct the flow when necessary. Unmixed resin (different color clinging to the sides and bottom) should not be drained into the crusher.
2. Succeeding kits may be mixed and poured individually as needed. LOCTITE® PC 9021 adheres to itself.

Caution: Use an approved, positive-pressure, supplied air respirator when welding or torch cutting near cured compound. **Do Not** use open flame on compound.

Technical Tips for Working With Epoxies

Working time and cure depends on temperature and mass:

- The higher the temperature, the faster the cure.
- The larger the mass of material, the faster the cure.

To speed the cure of epoxies at low temperatures:

- Store epoxy at room temperature.
- Pre-heat repair surface until warm to the touch.

To slow the cure of epoxies at high temperatures:

- Mix epoxy in small masses to prevent rapid curing.
- Cool resin/hardener component(s).

Not for product specifications

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.

Storage

Store product in the unopened container in a dry location. Material removed from containers may be contaminated during use. Do not return liquid to original container. 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**. Henkel cannot assume responsibility for product which has been contaminated or stored under conditions other than those recommended. If additional information is required, please contact your local Technical Service Center or Customer Service Representative.

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

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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Reference 0.0