Technical Data Sheet

LOCTITE® PC 7383

November 2019

PRODUCT DESCRIPTION

LOCTITE® PC 7383 provides the following product characteristics:

Technology	Polyurethane
Chemical Type	Polyurethane resin and Isocyanate
Appearance - Part A	Black paste
Appearance - Part B	Brown liquid
Appearance - Mixed	Black
Components	Two components - requires mixing
Mix Ratio, (by weight) Resin : Hardener	100 : 47
Mix Ratio, (by volume) Resin : Hardener	100 : 40
Cure	Room temperature cure
Application	Rubber repairs
Specific Benefits	• Non sagging • Easy to Use • High abrasion resistance • Excellent impact resistance • Renews worn surfaces

LOCTITE® PC 7383 is a 100% solid two component room temperature cure polyurethane compound that offers high abrasion, impact, and chemical resistance. The thixotropic properties of this product allows thicker coatings without slumping on the vertical surfaces or the underside of horizontal surfaces. It can be easily applied with a trowel or spatula. LOCTITE® PC 7383 is recommended for casting lining or repair of liners used to protect mill components, discharge chutes, hoppers, troughs, elbows and other processing equipment that is exposed to both abrasion and impact under typical dry service temperatures of –20°C to + 80°C (–4°F to + 176°F).

TYPICAL PROPERTIES OF UNCURED MATERIAL

Part A:

Specific Gravity, g/cm³	1.3
Viscosity, Brookfield - RV, 25 °C, mPa·s (cP): Spindle 7, speed 4 rpm	400,000 to 800,000

Part B:

Specific Gravity, g/cm³	1.23
Viscosity, Brookfield - RVDV, 25 °C, mPa·s (cP): Spindle 2, speed 20 rpm	90 to 150

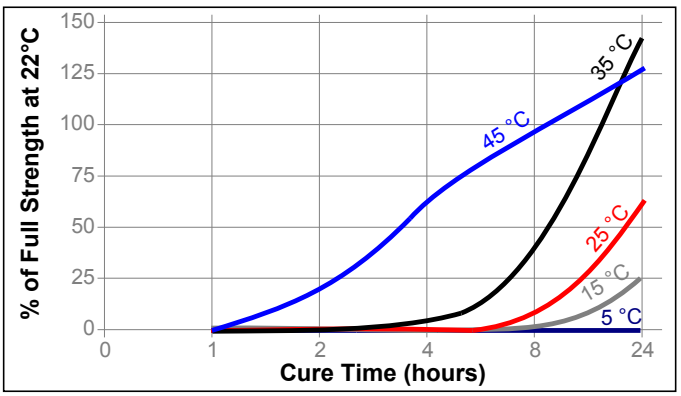
TYPICAL CURING PERFORMANCE

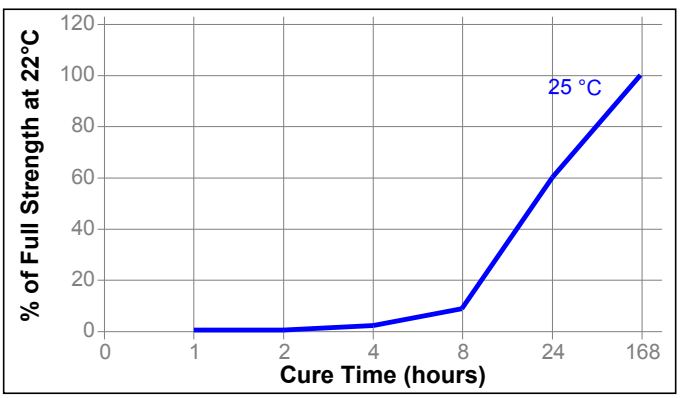
Curing Properties

Working Time @ 25 °C, minutes	50
Cure Time @ 25 °C, hours	24

Cure Speed vs. Temperature

The graph below shows the shear strength developed with time on grit blasted mild steel shears and tested according to ISO 4587.





TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 25 °C

Physical Properties:

Hardness (Shore A), ASTM D2240	90
Tensile Strength, ISO 37	15 N/mm² (2,175 psi)
Elongation, ISO 37, %	26
Abrasion Resistance, ASTM D4060: mg 1 Kg load, CS-17 wheels, Weight of Material Lost	<200
Impact Strength ASTM D 3281, 160 l/in	18 J (160 lb-in)

TYPICAL PERFORMANCE OF CURED MATERIAL

Adhesive Properties

Cured for 24 hours @ 25°C

Lap Shear Strength, ISO 4587:

Grit Blasted Mild Steel (GBMS)	N/mm² 6.43 (psi) (930)

"T" Peel Strength, ASTM D 1876:

Grit Blasted Mild Steel (GBMS)	N/mm 4 (lb/in) (>23)

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:

Surface Preparation:

1. For best performance, bond surfaces should be clean and free from dirt, grease, and other contaminants.
2. Remove all loose and damaged pieces of material from the repair surface such as old rubber, fabric etc..
3. Abrade the repair area with an abrasive wheel or wire wheel to roughen the bond surface. Avoid overheating the belt and melting the rubber during grinding.
4. Aggressively clean the prepared surfaces with Loctite® solvent based cleaner (i.e. SF 8220 Flex Cleaner or Teroson® D) and allow to dry.
5. For metal surfaces, apply **Teroson 8519 P** primer by brush and wait for 30 min for solvent to flash off.
6. For rubber surfaces, apply **Loctite SF 7282** rubber activator by brush evenly and allow to dry for 30 min.

Mixing:

1. Pour the hardener into the resin and mix thoroughly until uniform in color and consistency (1 – 2 minutes).
2. Product appears thin at the beginning of the mixing however it becomes a non-sag paste within the first 10 minutes.

Application Method:

1. Apply the urethane onto the substrate and work in with plastic spatula to allow maximum surface contact and adhesion.
2. Apply a very thin initial layer to ensure proper surface wetting and avoid bubble entrapment.
3. Excellent sag resistance up to 12 mm can be obtained on the vertical surface.

Coverage

To achieve a 6 millimeter (1/4 in) thickness, the coverage rate will be 1.26 m² for 10 kg kit excluding over thickness, repairs, etc.

Repairs

Any voids, pinholes, or low thickness areas found in the coating should be repaired by lightly abrading, cleaning, and applying further product.

Clean-up

Immediately after use clean tools with suitable cleaner, e.g. Loctite® SF 7611™ or a solvent such as acetone or isopropyl alcohol. Once cured, the material can only be removed mechanically

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. 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

(°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:
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Reference 0.0