

LOCTITE® PC 7383

January 2022

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 : 40
Mix Ratio, (by volume) resin : hardener	100 : 47
Cure	Room temperature cure
Application	Rubber repairs
Specific benefits	<ul style="list-style-type: none"> • Non sagging • Easy to use • High abrasion resistance • Excellent impact resistance • Renews worn surfaces

LOCTITE® PC 7383 is a 100% solid two component roomtemperature 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 properties

Specific gravity, g/cm ³	1.3
Viscosity, brookfield- RV, 25°C, mPa·s (cP): Spindle 7, Speed 4 rpm	4000,000 to 800,000

Part B properties

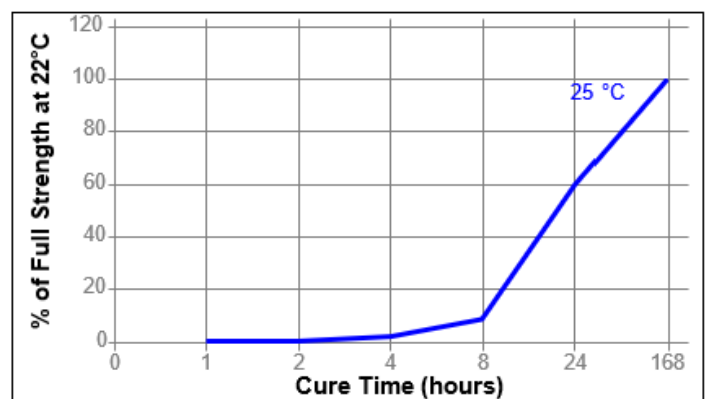
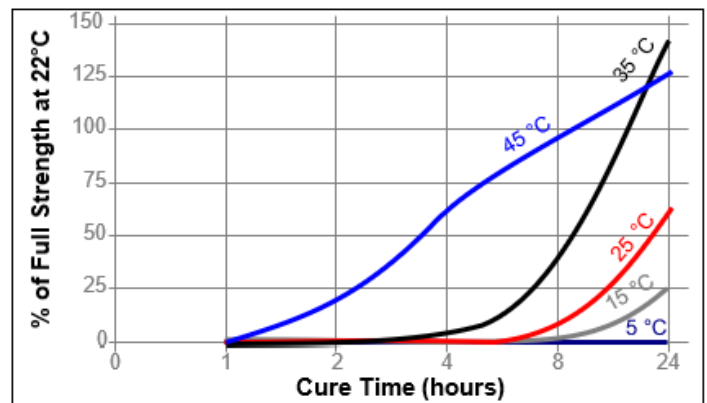
Specific gravity, g/cm ³	1.23
Viscosity, brookfield- RV, 25°C, mPa·s (cP): Spindle 2, Speed 20 rpm	90 to 150

Typical curing performance

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**Physical properties:**

Hardness (shore A), ASTM D2240		90
Tensile Strength, ISO 37	N/mm ² (psi)	15 (2,175)
Elongation, ISO 37, %		26
Abrasion resistance, ASTM D4060, mg 1kg load, CS-17 wheels, weight of material lost		<200
Impact strength ASTM D 3281, 160 l/in	N/mm ² (lb/in)	18 (160)

Adhesive properties

Cured for 24 hours @ 25°C

Lap shear strength	N/mm ²	6.43
Grit blasted mild steel (GBMS)	(psi)	(930)
"T" Peel Strength, ISO 11339:	N/mm ²	4
Grit blasted mild steel (GBMS)	(psi)	(>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 Material Safety Data Sheet.

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 over heating 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 to 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

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 (236 mils) thickness, the coverage rate will be 0.245 m² (2.64 ft²) for 3 kg (6.6 lb), excluding overthickness, repairs, etc.

Repairs

Any voids, pinholes, 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 LOCTITE® solvent based cleaner. Once cured, the material can only be removed mechanically.

Storage

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