Technical Data Sheet

LOCTITE® PC 7332™

July 2022

Product description

LOCTITE® PC 7332™ provides the following product characteristics:

Technology	Epoxy
Chemical type	Epoxy
Appearance (resin)	Grey paste
Appearance (hardener)	Dark grey
Appearance (mixed)	Grey
Components	Two components - requires mixing
Mix Ratio, (by weight) resin : hardener	4 : 1
Mix Ratio, (by volume) resin : hardener	4 : 1
Cure	Room temperature cure
Application	Protective Coating
Application temperature	10°C to 40°C (50°F to 104°F)
Specific benefits	• Silicon carbide filled for outstanding resistance to erosion. • High cross link polymer matrix - provides chemical resistance. • Easy to mix and use - renews worn surfaces fast, reduces downtime. • Extends wear life - resists sliding abrasive wear, slurry erosion and eliminates costly wear component inventory. • Non sag - provides abrasion resistance on over-head and vertical surfaces.

LOCTITE® PC 7332™ is a two-part silicon carbide filled 100% solid epoxy resin system designed to protect, rebuild and repair high wear areas of processing equipment, such as desulfurization pumps and ducts, slurry pumps and slag granulation pumps which are subjected to severe wet abrasion. Can also be used for particle abrasion under dry conditions in transport elbows, chutes and other equipment. This product is typically used in applications with an operating range of -30°C to 120°C.

Typical properties of uncured material

Resin	
Density @25°C, ISO 1675, g/cm³	2.26
Viscosity, Brookfield DV-II Pro, 25°C, mPa·s (cP):	3,500,000
Spindle 7, speed 1 rpm	
Hardener	
Density @25°C, ISO 1675, g/cm³	2.21
Viscosity, Brookfield DV-II Pro, 25°C, mPa·s (cP):	1,400,000
Spindle 7, speed 1 rpm	
Mixed	
Density @25°C, ISO 1675, g/cm³	2.25

Typical curing performance

Curing properties	
Working time @ 25°C, min	30
Cure time @25°C, hours	6
Coverage @0.6 cm thick per 10 kg kit, m²	0.74

Typical performance of cured material

Cured for 24 hours @ 25°C

Physical properties:	
Shore hardness ISO 868, Durometer D	85
Wet temperature resistance, °C (CSA-Z245.20-06/CSA-Z245.21-06 Rating 1)	>90

Note to CSA standard: After storage in hot air or water for 24 hours at the temperature indicated the coating applied on a metal panel, Rating 1, cannot be removed cleanly.

Cured for 1 week @ 25°C

Physical properties:

Glass transition temperature (Tg), °C TMA, ISO 11359-2		76
Coefficient of Thermal Expansion, ISO 11359-2, K^{-1}:		
Below Tg		1.73×10^{-05}
Above Tg		12.63×10^{-05}
Compressive Strength, ASTM D 695	N/mm^2 (psi)	96.9 (14,000)
Slurry abrasion test (weight loss),% ASTM B 611		0.29
Slurry erosion test (weight loss),% ASTM G 75		0.13
Miller test (weight loss), ASTM G 75-01, %		
2 hours		0.33
4 hours		0.43
6 hours		0.6
Dry abrasion test (weight loss), ASTM G 65, %		0.16
Gas jet erosion test (weight loss), ASTM G76-04, %		
Angle 45°		0.089
Angle 90°		0.074

Typical performance of cured material

Lap shear strength, ASTM D1002 Grit blasted steel	N/mm^2 (psi)	11.3 (1,600)
Lap shear strength, ASTM D1002 Grit blasted aluminum	N/mm^2 (psi)	9.5 (1,400)

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

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.

1. Remove dirt, oil, grease etc with a suitable cleaner, e.g. high pressure water cleaning system using LOCTITE®cleaner/degreaser.
2. Blast all surfaces to be coated with a sharp edged angular grit to a depth of profile of 75 to 100 microns and a degree of cleanliness of Near White Metal (SIS SA 2½ /SSPC-SP 10).
3. After blasting, metal surfaces should be cleaned with waterless cleaner, e.g. with Loctite® SF 7365™ (Loctite® Pro Strength Parts Cleaner), and be coated before any oxidation or contamination takes place.
4. Metal that has been in contact with salt solutions, e.g.seawater, should be grit blasted and high-pressure waterblasted, left for 24 hours to allow any salts in the metal tosweat to the surface. A test for chloride contaminationshould be performed. The procedure should be repeateduntil chloride concentration on the surface is below 50mg/m².

Mixing

1. Measure 4 parts resin to 1 part hardener by volume or weight.
2. Transfer measured quantities or entire kit onto a clean and dry mixing surface and mix together with a trowel until uniform in color.
3. If mixing larger quantities, a spiral mixing blade attached to a high torque electric or pneumatic drill can be used.
4. If resin and hardener temperatures are 15°C or below, preheat resin only to about 30°C but not to exceed 40°C.

Application

1. Apply fully mixed material to the prepared surface.
2. Initially apply the material in a very thin layer to “wet” out the surface and avoid air entrapment.
3. Build up to desired thickness (minimum 6 mm), avoid air entrapment.
4. At 25°C the working time is 30 minutes, and functionalcure time is 7 hours. Working and cure time depend ontemperature and mass - the higher the temperature andthe larger the mass, the faster the cure.

Inspection

1. Visually inspect for pinholes and voids just after application.
2. Once the coating has cured, repeat visual inspection to confirm absence of pinholes, voids, or damaged areas.
3. Control thickness of the coating, especially in the critical points.
4. Perform a test with a holiday detector to confirm coating continuity.

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.

Technical tips for working with epoxies
Environmental conditions
- Relative humidity: <85%
- Ambient temperature: >15°C (60°F) and rising
- Substrate temperature must always be 3°C (7°F) higher than the dew point to avoid condensing moisture on parts.

Working time and cure speed 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 or warm resin/hardener component(s) prior to mixing. Never use open flame.
- Pre-heat repair surface until warm to the touch.
- Tent working area to achieve suitable environmental conditions.

To slow the cure of epoxies at high temperatures:
- Store epoxy at room temperature or cool resin/hardener component(s) prior to mixing.
- Work during cool, morning hours and shade area from direct sun.

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

Disclaimer
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. Any liability in respect of the information in the Technical data sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Belgium NV, Henkel Electronic Materials NV, Henkel Nederland BV, Henkel Technologies France SAS and Henkel France SA please additionally note the following:
In case Henkel would be nevertheless held liable, on whatever legal ground, Henkel's liability will in no event exceed the amount of the concerned delivery.

In case products are delivered by Henkel Colombiana, S.A.S. the following disclaimer is applicable:
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. 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. Any liability in respect of the information in the Technical Data Sheet or any other written or oral recommendation(s) regarding the concerned product is excluded, except if otherwise explicitly agreed and except in relation to death or personal injury caused by our negligence and any liability under any applicable mandatory product liability law.

In case products are delivered by Henkel Corporation, or Henkel Canada Corporation, the following disclaimer is applicable:
The data contained herein are furnished for information only and are believed to be reliable. We cannot assume responsibility for the results obtained by others over whose methods we have no control. It is the user's responsibility to determine suitability for the user's purpose of any production methods mentioned herein and to adopt such precautions as may be advisable for the protection of property and of persons against any hazards that may be involved in the handling and use thereof. In light of the foregoing, **Henkel Corporation specifically disclaims all warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose, arising from sale or use of Henkel Corporation's products. Henkel Corporation specifically disclaims any liability for consequential or incidental damages of any kind, including lost profits.** The discussion herein of various processes or compositions is not to be interpreted as representation that they are free from domination of patents owned by others or as a license under any Henkel Corporation patents that may cover such processes or compositions. We recommend that each prospective user test his proposed application before repetitive use, using this data as a guide. This product may be covered by one or more United States or foreign patents or patent applications.

Trademark usage
Except as otherwise noted, all trademarks in this document are trademarks of Henkel Corporation in the U.S. and elsewhere. ® denotes a trademark registered in the U.S. Patent and Trademark Office.

Reference 2

This document was created and digitally signed by tdx.henkel.com at 2025-11-27T05:50:15.175Z