Technical Data Sheet

LOCTITE® PC 7204

Known as LOCTITE® 7204 High Performance Quartz
June 2020

PRODUCT DESCRIPTION

LOCTITE® PC 7204 provides the following product characteristics:

Technology	Epoxy
Chemical Type	Epoxy
Appearance (primer after mix)	Clear
Appearance (top coat after mix)	Grey
Appearance (filler)	Dark yellow
Components	Five components: Primer (resin & hardener) Top coat (resin & hardener & filler)
Mix Ratio by volume: resin : hardener / filler	Primer: 100 : 61/ -
Mix Ratio by volume: resin : hardener / filler	Top coat: 100 : 60/ 282
Cure	Room temperature cure after mixing
Application	Coating
Application Temperature	10°C to 40˚C (50°F to 104°F)
Service Temperature (Dry)	-29°C to +66˚C (-20°F to 150°F)
Specific Benefits	• Chemical resistant • Non-shrinking • Bonds to concrete

LOCTITE® PC 7204 is a highly filled quartz epoxy system designed for restoring old concrete or for the maximum protection of new concrete under typical dry service temperatures of -29 °C to +66 °C. Areas damaged by chemical attack may be resurfaced with LOCTITE® PC 7204 once the concrete has been adequately reconditioned to a natural, clean state. LOCTITE® PC 7204 provides a highly resistant surface to concentrated acids, alkalis, and solvents. It is an easily applied, trowelable system that should be applied at a minimum 6 mm build in order to provide maximum chemical resistance. Typical applications include chemical containment areas, repairing spalled areas and holes and cracks in floors, resurfacing ramps and stairs and chemical spill areas and grouting.

TYPICAL CURING PERFORMANCE

Working life, @ 23 °C, minutes:

Primer	45
Topcoat, 1,000 g mass	60

Cure Time @ 23 °C, hours 24

TYPICAL PERFORMANCE OF CURED MATERIAL

Cured @ 23 °C

Physical Properties

Compressive Strength, ASTM D695	N/mm² (psi)	82.7 (12,000)

TYPICAL ENVIRONMENTAL RESISTANCE

Chemical/Solvent Resistance

Cured for 1 week @ 23 °C

Tested @ 23 °C

Acids

Acetic Acid	10 %	Short term or intermittent immersion
Acetic Acid	20 %	Spill, splash
Hydrochloric acid	10 %	Continuous long term immersion
Hydrochloric acid	20 %	Continuous long term immersion
Hydrochloric acid	37 %	Short term or intermittent immersion
Nitric acid	10 %	Continuous long term immersion

Alkalis

Ammonium Hydroxide	25 %	Continuous long term immersion
Sodium hydroxide	10 %	Continuous long term immersion
Potassium hydroxyde	20 %	Continuous long term immersion

Solvents

Deionized Water	100 %	Continuous long term immersion
Methanol	100 %	Short term or intermittent immersion
Xylen	100 %	Continuous long term immersion
Trichloroethane	100 %	Continuous long term immersion
Toluene	100 %	Short term or intermittent immersion
Ethanol	100 %	Short term or intermittent immersion

Hydrocarbons

Diesel Fuel	100 %	Continuous long term immersion

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

- To ensure optimum performance, the surface must be prepared correctly.
- Concrete must be cured for at least 30 days.
- Remove all grease, oil and dirt by washing thoroughly.
- Remove all surface contaminants such as old coatings, loose concrete, dust by dry abrasive blasting, water blasting, scarifying or by thoroughly acid etching and rinsing.
- Prepared surface must be rough and porous with no excess water – dampness is acceptable.

Primer:

- The two component primer is packaged to the proper mix ratio and must be mixed thoroughly resulting in a clear solution.
- Primer can be applied by brush, roller, squeegee, or spray to a uniform light coat of 0.5 to 1.0 mm(20 mil to 40 mil).
- Working time of the primer is 45 minutes at 23°C(74°F).

Top Coat:

- Topcoat must be applied within 4 hours after the primer.
- Material must be between 21°C to 32°C(70°F to 90°F) to allow for proper mixing.
- Thoroughly mix the topcoat resin and hardener.
- Transfer the mix into a concrete mixer, gradually add the quartz and mix for 3-4 minutes. All quartz must be thoroughly wetted out.

Application:

- The primer must be wet prior to applying the top coat. If area has dried - re-prime.
- LOCTITE® PC 7204 must be applied a minimum thickness of 6 mm (0.24 in) at a minimum application temperature of 16°C (61°F). The higher the temperature, the easier the application.
- Use a screed guide and rigid bar or a screed box not exceeding 1.2 m (47ft) in width and apply a minimum of 6 mm (0.24 in) .
- To finish use steel trowels. When working on a large area, a power trowel can be used. The areas must be worked and all trowel marks removed before the end of working time.
- Seams and cold joints should run parallel with traffic patterns.
- Working time of the topcoat is 60 minutes at 23°C (74°F).

Inspection

- Visually inspect for pinholes and voids just after application.
- Once the coating has cured, repeat visual inspection to confirm absence of pinholes, voids or damaged areas.

Coverage

To achieve a 6 millimeter (0.24 in) thickness, the coverage rate will be 1.46 m² (15.7 ft²) for 20 kg (44 lb), excluding overthickness, 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 a LOCTITE® solvent base 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 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 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

Note:
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