

LOCTITE[®] PC 6231[™]

Known as LOCTITE[®] Fixmaster[®] Crack Filler SL January 2015

PRODUCT DESCRIPTION

LOCTITE[®] PC 6231[™] provides the following product characteristics:

Technology	Polyurethane
Chemical Type	Polyurethane
Appearance (Resin)	Amber
Appearance (Hardener)	gray
Appearance (Mixture)	Gray
Components	Two component - requires mixing
Mix Ratio, by volume -	1:1
Resin : Hardener	
Cure	Room temperature cure after mixing
Application	Sealing and Concrete repair
Application Temperature	-40 to 43 °C

LOCTITE[®] PC 6231[™] is a two component, rapid curing 1:1 ratio polyurea joint filler designed for heavy duty traffic and freezer applications. It is a self-leveling, 100% solids low viscosity, flexible system that provides 10-15% movement of installed joint width. This product can be applied at temperatures between -40°C and 50°C (-40F to 120F). Typical applications include filling interior control joints or new construction saw joints on horizontal concrete surfaces. The joint width should be a maximum of 3/4 inch (1.9cm). The joint depth should be a minimum of 3 times the width, or 2.2 inches (5.7cm). For light foot traffic, the minimum depth can be reduced to 0.5 inches (1.3cm). LOCTITE[®] PC 6231™ is designed for industrial floor applications receiving heavy vehicle traffic and can be used in exterior applications where minimal joint movement from thermal cycling will occur. NOTE: LOCTITE[®] PC 6231[™] is not intended for joints that are subject to higher than 10-15% movement. LOCTITE[®] PC 6231[™] is a moisture sensitive product and cannot be applied to wet or damp joints.

TYPICAL PROPERTIES OF UNCURED MATERIAL

Resin: Weight Per Gallon, lbs/gal	8.89 to 9.29 ^{LMS}
Viscosity @ 25°C, mPa⋅s (cP)	586 to 1,186 ^{LMS}
Flash Point - See SDS	
Hardener : Weight Per Gallon, Ibs/gal	8.47 to 8.87 ^{LMS}
Viscosity @ 25°C, mPa⋅s (cP)	392 to 1,142 ^{LMS}
Flash Point - See SDS	

Mixed:

Viscosity @ 25°C, mPa·s (cP)	525
VOC, g/l	1.7

TYPICAL CURING PERFORMANCE

Curing Properties

Gel Time @ 24 °C, minutes	3
Cure Time @ 24 °C, minutes	90

TYPICAL PROPERTIES OF CURED MATERIAL

Cured @ 25 °C, for 7 days Physical Properties:	
Adhesion to Concrete, ASTM D 4541	N/mm² 1.9 (psi) (275)
Tensile Strength, @24°C, ASTM D412	N/mm² 8.3
(ISO 37)	(psi) (1,200)
Elongation, ASTM D412 (ISO 37), %	82
Shore Hardness, ISO 868, Shore A	75 to 80

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. Concrete must be clean, **COMPLETELY DRY** with no presence of moisture and then profiled or textured.
- 2. New concrete must be cured for at least 30 days.
- 3. Remove all dust, debris, oil and other contamination from the construction and/or saw cut joints.
- 4. For best results, re-cut joints with a dry diamond blade. All dust must be removed using pressurized air.

Cartridge Preparation:

- 1. While preparing cartridge for dispensing, keep cartridge in an upright position to prevent material from leaking out of the cartridge. Do not tilt cartridge until material is to be dispensed.
- 2. Shake cartridge vigorously for 45 seconds, then stand upright for 5 minutes.
- 3. Remove plastic cap from the top of cartridge.
- 4. Immediately place the nozzle onto the cartridge and secure with nut by threading in a clockwise direction.



Ensure the nozzle and cartridge assembly is secure.

- 5. Insert cartridge with nozzle attached into dispenser. Make sure cartridge is properly positioned with the shoulder of the cartridge flush with front/top bracket of the dispenser.
- 6. With nozzle pointing upward at about a 45° angle, slowly apply pressure to dispenser to purge air from cartridge and nozzle.
- Once air has been purged, continue holding straight up and balance the cartridge by dispensing 1/2 stroke of material into a rag (1-2 quick bursts if using an air tool).
- After purging and balancing, always point cartridge downward when not dispensing to prevent mixed material in the nozzle from flowing back into the cartridge.

Application:

- 1. To avoid bonding to the bottom of the joint, a backer rod or kiln-dried sand can be placed prior to application of adhesive. Bonding to the bottom can result in sealant bond failure due to joint expansion/contraction.
- Place the mixing nozzle directly over the crack or joint to be repaired. Dispense material and allow to gravity feed into the crack/joint. Overfill the crack/joint so that material is slightly higher than the face of the concrete you are repairing.
- 3. Allow LOCTITE[®] PC 6231[™] to set for approximately 45 minutes, then use a sharp floor scraper to shave excess material from top of slab.
- 4. Allow material to fully cure (90 min at 24°C/74F) before subjecting repaired ara to any type of traffic.

Loctite Material Specification^{LMS}

LMS dated October 10, 2008. Test reports for each batch are available for the indicated properties. LMS test reports include selected QC test parameters considered appropriate to specifications for customer use. Additionally, comprehensive controls are in place to assure product quality and consistency. Special customer specification requirements may be coordinated through Henkel Quality.

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

 $(^{\circ}C \ge 1.8) + 32 = ^{\circ}F$ kV/mm $\ge 25.4 =$ V/mil mm / 25.4 = inches μ m / 25.4 = mil N $\ge 0.225 =$ lb N/mm $\ge 5.71 =$ lb/in N/mm² $\ge 145 =$ psi MPa $\ge 145 =$ psi MPa $\ge 145 =$ psi N·m $\ge 8.851 =$ lb·in N·m $\ge 0.738 =$ lb·ft N·mm $\ge 0.142 =$ 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 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 0.1