Technical Data Sheet

LOCTITE® PC 6315

November 2014

PRODUCT DESCRIPTION

LOCTITE® PC 6315 provides the following product characteristics:

Technology	Epoxy
Chemical type	Epoxy
Components	Two components - requires mixing
Mix Ratio, by volume -Base : Hardener	4.26 : 1
Mix Ratio, parts by weight - Base : Hardener	8.5 : 1
Cure	Room temperature cure
Application	Non-slip coating
Specific benefits	• Reduces accidents (slips and falls) in the workplace • Fire retardant in the cured state • Superior resistance to chemicals and wear • Provides safer traction for heavy vehicular traffic • No solvents - allows use in odor sensitive applications such as wineries, food processing facilities, hospitals and confined areas • Resists most acids, alkalis, solvents, grease, oil, salt water, detergents, alcohol, gasoline, jet fuels and hydraulic fluids • Good impact resistance

LOCTITE® PC 6315 is a solvent-free, two-component epoxy. Applied with roller or trowel, it creates an extremely durable anti-slip coating that withstands heavy vehicular traffic on concrete, wood and metal surfaces in odor-sensitive areas, under typical dry service temperatures of -29°C to 60°C. Typical applications include heavy duty anti-slip finish for concrete and steel ramps, walkways, locker rooms, loading docks, marine applications, machine rooms, assembly areas and stairs where a solvent-free material is required.

Typical properties of uncured material

Volume of solids, %	100
VOC, g/l	0

Coverage:

Roller	1.8 to 3.2 m² per 3.8 l (20 to 35 ft² /gal)
Spray	5.6 m² per 3.8 l (60 ft² /gal)
Trowel	3.7 m² per 3.8 l (40 ft² /gal)

Typical curing performance

Dry time @22°C, hours:

Heavy pedestrian traffic	24 to 72
Light pedestrian traffic	12 to 24

Note:
Temperature and thickness of application affect dry time. Temperatures under 10°C (50°F) will result in a substantially longer cure time. Temperatures over 27°C (80°F) will result in a shorter cure time. The thicker the application, the longer the cure time.

Typical properties of cured material

Cured @ 22°C except where noted

Physical Properties:

Coefficient of friction , ASTM F 609:

Dry	1.1
Wet	1.0

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

The use of a primer will increase the adhesion and durability of LOCTITE® PC 6315.

For coating concrete, wood, tile, and other porous surfaces, please refer to the LOCTITE® PC 6315 Water Based Primer Sealer Technical Data Sheet.

For coating metal surfaces, please refer to the LOCTITE® Big Foot™ Metal Primer Technical Data Sheet.

LOCTITE® PC 6315 can be applied to any clean, dry surface. Recommended methods of cleaning are as follows:

1. All surfaces to be coated should be sound, clean, dry and free of all contaminants.
2. Loose dirt and dust are best removed by a stiff bristle brush or by blowing down with dry, oil-free compressed air.
3. Oil, wax and grease should by removed by dissolving in a water-based cleaner/degreaser such as LOCTITE® Natural Blue Cleaner and Degreaser. Rinse thoroughly with fresh water while the dissolved solution is still wet. An alternate method is to clean with appropriate solvents such as mineral spirits as per SSPC-SP-1. It is important that the solvent be removed from the surface while still liquid and not be allowed to evaporate during the cleaning process and redeposit oil or grease on the deck. Ample solvent should be applied to the surface to completely dissolve the grease and oil. The solvent containing the dissolved grease and oil should be wiped up with clean rags before the solvent dries.
4. Depending on concentration and type, chemical contamination should be removed by detergent power washing followed by a liberal fresh water while the detergent is still wet. Allow surface to completely dry.
5. After cleaning, any remaining loose particles should be removed by brushing or blowing with dry, oil-free compressed air.

New concrete:

1. New concrete should be properly cured for at least 30 days with good ventilation.
2. After proper curing, new floors must be swept clean and all contaminants which might interfere with the adhesion of the coating system including laitance, curing membranes, surface hardeners, greases and oils be removed.
3. An appropriate profile must be created using chemical or mechanical means.
4. The preferred method to prepare floor surfaces and to remove paint, laitance, curing membranes and surface hardeners is by mechanical removal of the same with a portable shot blast cleaning machine.
5. Chemical cleaning of laitance and unbounded particles can be accomplished by etching the surface with a muriatic acid or buffered acid solution. Follow acid manufacturer's application and safety instructions. After the acid has finished reacting with the concrete, the residue should be removed by a liberal fresh water rinse or preferably by power washing. Allow the surface to completely dry.
6. NOTE: Acid etching will not remove oil, grease or wax. If the acid does not bubble or foam when spread on the concrete, the surface should be examined for films or oil, grease, wax, curing membranes, hardeners or other sealers. If such film is present, it must be removed.

Aged and uncoated concrete floors:

1. Proceed as for new concrete with particular emphasis on examinations for grease, oil and chemical contamination and subsequent adequate cleaning.

Asphalt:

1. Sweep to remove all dirt and other loose contaminants. Remove oil, grease, dirt, etc., by dissolving in a water-based cleaner/degreaser such as Loctite® Natural Blue Cleaner and Degreaser then flush thoroughly with clean water and allow to dry.

Wood:

1. Remove any weathered wood to expose clean, sound wood. Smooth wood should be sanded to roughen up the surface.

Tile and fiberglass:

1. Glazed or ceramic tile must be sanded to remove all glaze and to roughen up the surface. Remove any residual sanding dust by air blowing or wiping with alcohol.

Metal:

1. Remove all oil, grease, dirt, wax or other contaminants by dissolving with a waterbased cleaner/degreaser.
2. Flush thoroughly with clean water and allow to dry.
3. Remove all paint, rust and mill scale, preferably by sandblasting.

Mixing:

Thoroughly premix contents of resin can with a mechanical mixer, using LOCTITE® Big Foot™ Mixer Blades, until material assumes a uniform color and appearance.
Pour the hardener into the base component container. Mechanically mix (using same mixer blade) until uniform in color.

Application

LOCTITE® PC 6315 can be applied at surface temperatures of 10 to 54°C (50 to 129°F). Application is not recommended when the surface temperature is above or below these temperatures. It can be applied by roller, trowel or spray.

Roller - Rolled applications provide the most aggressive anti-slip characteristics with an irregular, ridged profile.

1. Use a phenolic roller. It is important that the rolled profile expose the maximum amount of anti-slip aggregate. If aggregate is not properly exposed, the coating may become slippery when wet.
2. Pour a "ribbon" of material on the surface approximately 60cm x 15cm (2 in x 6 in). Roll material toward you with a moderate amount of pressure. Do not over-roll too many times or press down too heavily. Be careful that material does not build up too thickly along welds (roll across welds not along them). Material applied too thickly may not cure properly or it may crack.
3. Higher temperatures will shorten drying time and conversely, lower temperatures and high relative humidity will lengthen drying time. Exterior applications must be protected from rain for at least 12 to 24 hours after application. Protect from heavy or extended exposure to water, oil, and chemicals for 5 to 7 days during final cure.

Spray - Spray applications will result in a uniform appearance with good non-slip characteristics.

1. LOCTITE® PC 6315 should not be thinned. Thinning will result in grit not remaining properly in suspension.
2. Specialized mastic type spray equipment is required. A recommended set-up is as follows:

   A. A 19 liter (5 gallon) outlet pressure tank equipped with a double regulator and an air driven agitator, and 2.5 cm (1 inch) I.D. outlet pipe.
   B. 7.6 m (25 ft) of .95 cm (3/8") air hose with ..95 cm (3/8") female connectors at each end.
   C. 7.6 m (25ft) of 1.9 cm (3/4") air hose with 1.9 cm (3/4") female connectors at each end.
   D. A Binks Model 7E2 spray gun equipped with .64 cm (1/4") (#45) fluid nozzle and a ..64 cm (1/4") internal air cap or a Binks Model 52-2012 (1.2m (4 ft)) pole gun equipped with the same fluid nozzle and air nozzle.

3. Minimum air supply required is 20 CFM at 90 lbs. pressure. Recommended is 0.1 to 1.4 MPa (15 to 20 psi) on material and 0.14 to 0.17 MPa (20 to 25 psi) on atomization. Always keep atomization air pressure higher than pot pressure. Keep agitator running slowly. Good coverage and film thickness will be obtained working at 45 to 60 cm (18 to 24) from the surface. Overlap strokes about 50%. Make sure of application. Very little abrasive rebound will be noticed at 0.1 MPa (15 psi), however, it will be more noticeable at higher pressure.
4. When temperature is above 26°C, it is advisable to flush the spray equipment with water every hour or so in order to prevent the possibility of any material setting up and plugging the equipment.

Trowel - Provides excellent anti-slip characteristics with a rough, textured surface.

1. Use a flexible bladed plasterer's finishing trowel approximately 10 cm x 30 cm (4 inch x 12 inch). Use smooth edges not notched.
2. Pour a "ribbon" of material on the surface approximately 60 cm x 15 cm (2 inch x 6 inch).
3. Hold trowel at 45° angle to surface and spread with sweeping motion. Reverse angle of trowel for opposite stroke. Pull material toward you. To cover corners, pull straight strokes using material on the trowel. Trowel across welds to avoid too thick an application.

Surface maintenance - Maintain a clean surface to ensure that the anti-slip safely performance is maximized. We recommend the following cleaning procedure:

1. Apply an all-purpose, biodegradable cleaner/degreaser.
2. Scrub surface with a long-handled, fibre bristled brush or floor machine.
3. Rinse with clean water and dry. Foreign matter such as chewing gum should be removed with a scraper or putty knife and then the surface should be cleaned following above procedure.
4. Although this anti-slip coating is extremely durable, it is not permanent and will require occasional touch-up, especially in high traffic areas. This material can be re-applied over itself. To re-apply, follow instructions above for surface preparation, mixing and application.

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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