

# **GUARD PU**

DS-895-0721

# Globally Proven Construction Solutions



# 1. PRODUCT NAME

**GUARD PU** 

#### 2. MANUFACTURER

LATICRETE Europe S.r.l. a socio unico Via Paletti, snc, 41051

Castelnuovo Rangone MO, Italy

Telephone: +39 059 535540 Email: info@laticreteeurope.com

Website: laticrete.eu

#### 3. PRODUCT DESCRIPTION

GUARD PU is a solid colour, solvent-based two-part polyurethane coating that offers above average chemical and abrasion resistance.

With initial surface preparation and priming, it may be applied directly to a variety of substrate including concrete, metal/steel, epoxy, and polyaspartic. GUARD PU provides good impact, abrasion, and chemical resistance characteristics.

GUARD PU is formulated with aliphatic hardener which gives it good colour stability to light (UV stable), making it suitable for both interior and exterior applications. It is available in a gloss or matte finish and can be colour-matched to any standard RAL colour. For more information regarding specific systems or to discuss your next project, please contact us today.

Previously called GUARD PU SB MATT or GUARD PU SB LUCID.

#### Uses

- Within seamless multi-build LATICRETE® flooring systems including GUARD, BUILD, and FLOW
- For interior and exterior use
- Industrial and heavy traffic applications
- · Pedestrian areas
- · Schools and educational facilities
- · Hospitals and healthcare facilities
- · Laboratories and clean rooms
- · Retail spaces and shopping malls
- Showrooms and museums
- · Stadium, sports, and event spaces
- Parking garages
- Painting of metal surfaces, such as machinery, cranes, switchgear supports, transformers, etc.
- Finishing paint for fiberglass substrates (boats, swimming pools, etc.)

#### **Advantages**

- Good weatherability and UV resistant retains colour finish, even outdoors
- Superior adhesion to various substrates can bond to metal/steel and PVC
- Hygienic and easy to clean good resistance to detergents and solvents
- Good chemical, abrasion, impact and wear resistance
- Long working time 2 hours
- · Available in gloss or matte finish
- Wide range of colour options can be matched to any standard RAL colour

#### Suitable Substrates

- Steel
- Metal
- Wood
- Plastic
- Concrete

### **Packaging**

Gloss Finish: GUARD PU

- 3 kg kit (2 kg Part A + 1 kg Part B)
- 15 kg kit (10 kg Part A + 5 kg Part B)

Matte Finish: GUARD PU Matte

- 3 kg kit (2 kg Part A + 1 kg Part B)
- 15 kg kit (10 kg Part A + 5 kg Part B)

#### **Approximate Coverage / Consumption**

 $\sim$ 5 m² per 70 µm of thicknesses / 1 kg of product. Coverage values are approximate and will vary based on surface condition, preparation methods and application technique.

#### **Shelf Life**

Factory sealed containers of this product are guaranteed to be of first quality for one (1) year if stored off the ground in a dry area. High humidity will reduce the shelf life of bagged product.

#### Limitations

- Please note that with all resinous coating systems, exterior full sun environments in warm climates may exhibit above average surface temperatures. This is especially true with darker finishes. As a result, resinous systems may not be ideally suited for exterior pool deck applications.
- Ferrous metals such as steel and iron must be pretreated with an appropriate primer.
- DO NOT apply in the presence of moisture.

#### **Cautions**

Thoroughly read all technical data sheets, application guidelines, warranty disclaimers and Safety Data Sheets (SDS) prior to use. Application guides depending on the system employed are available at www.laticrete.eu.

- Wear protective gloves, protective clothing and eye protection.
- Harmful if inhaled. Avoid breathing dust/fume/gas/ mist/vapors/spray. Use only outdoors or in a well ventilated area.
- Causes skin irritation. Rinse skin with water/shower. If skin irritation or rash occurs: Get medical advice/attention.
- Causes serious eye irritation. If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
- Use tape to protect areas not being treated.
- Surface temperature may be elevated if exposed to direct sunlight in hot climates.
- · Keep out of reach of children.

# 4. TECHNICAL DATA



**Physical Properties** 

Classification according to EN 13813:	SR-B2,0-AR1-IR20	
Reaction to fire according to EN 13501-1:	F	
Basis:	Polyurethane resins	
Colour:	RAL colours	
Appearance:	Gloss or Matte	
	Value	Test Method
Bond Strength:	> 2,1 N/mm²	EN 13892-8
Wear Resistance:	< 90 µm	EN 13892-4
Impact Resistance:	> 20 Nm	EN ISO 6272-1
Temperature Resistance:	From -30°C to +90°C	
Bond Strength: Wear Resistance: Impact Resistance:	Value > 2,1 N/mm² < 90 μm > 20 Nm	Test Method EN 13892-8 EN 13892-4 EN ISO 6272-1

**Working Properties** 

Consistency:	Fluid	
Wet Density:	1.2 kg / lt (+/- 0.05)	
Application Temperature	From + 10°C to + 35°C	
Application R.H.:	< 70%	
Mix Ratio:	2:1 by weight	
% Solids:	52% (+/- 2%)	
Working Time:	2 hours	
Minimum Re-Coat Time:	6 hours	
Maximum Re-Coat Time:	24 hours	
Maximum/Thickness:	40 - 100 microns	
Foot Traffic:	72 hours	
Vehicular Traffic:	7 days	
Final Cure:	7 days	

(at 23°C, 50% R.H.)

Specifications subject to change without notification. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation methods and site conditions.

# 5. INSTALLATION

### **Surface Preparation - Concrete**

Surfaces to be coated must be free of grease and any other contaminants that may impede adhesion. Always check the surface for any bond inhibitors prior to application. Any repairs must be addressed prior to application and should be repaired in accordance with ICRI standards. Do not use alcohol to clean prior to application.

Concrete must be mechanically profiled. Ensure that all surface laitance is removed prior to coating. If wet grinding, allow surface to fully dry prior to coating. Properly prepared concrete substrate must have a tensile strength ≥1,4 MPa when tested in accordance with ASTM C1583.

Concrete must be tested for relative humidity (RH) prior to installation of any coatings. The RH of the slab must

not exceed 3%. If RH measures >3%, use LATICRETE® MOISTURE VAPOR VARRIER.

# **Surface Preparation - Over Existing Tile**

Existing tile must be mechanically abraded and profiled using a floor grinder, shot blaster, or other similar equipment. Refer to TDS 450: Installation Guideline for Installing LATICRETE® Floor Coatings over Existing Tiled Surfaces.

# **Surface Preparation - Metal/Steel**

Surfaces to be coated must be free of grease, oils, cutting fluids and any other contaminants that may impede adhesion. Always check the surface for any bond inhibitors and clean the surface prior to application. Pretreat ferrous surfaces such as steel or iron with appropriate primer such as PRIMER EP or PRIMER EP WB.

### Mixing Part A with Part B

Mix Part A and Part B 2:1 by weight (or 62:38 by volume, Part A: Part B), using a clean, dry working vessel. Use a paddle mixer on slow speed for 2 minutes. Avoid overmixing or creating a vortex that could introduce air. Do not mix below the dew point, which will shorten the pot life. No induction or waiting time is required prior to use.

### **Application**

GUARD PU can be applied by brush or roller in two coats. It can also be applied with a plastic spatula or squeegee, which may only require one coat. Spread evenly over all prepared surfaces to desired thickness, in a total thickness between 40 and 100  $\mu$ m. Use a brush or small roller around penetrations, columns, and any other obstructions. Periodically check mil thickness using a wet film thickness (WFT) gauge. Do not allow the product to puddle or pool. Contact LATICRETE directly for specifics on effective application techniques

The applied material will be dry to the touch after about 4 to 6 hours from application, dependent on ambient temperature, substrate temperature and humidity. Product may be re-coated within 6 to 24 hours following application. Light foot traffic is acceptable about 72 hours following application and vehicular traffic is acceptable 7 days after application.

#### **Notes**

Mock-ups and field test areas are required in order to validate performance and appearance relate characteristics (including but not limited to color, inherent surface variations, wear, anti dusting, abrasion resistance, chemical resistance, stain resistance, coefficient of friction, etc.) to ensure system performance as specified for the intended use, and to determine approval of the coating system.

Variability in job site conditions (including but not limited to surface preparation, sunlight, humidity, dew point, temperature, etc.) during application of LATICRETE

flooring products may lead to fisheyes, blistering, pinholes, wrinkling, or outgassing of air in the concrete and are not product defects. Additional coats, shading or evening application may be required.

# 6. AVAILABILITY AND COST

# **Availability**

LATICRETE® materials are available worldwide. For distributor information, please contact LATICRETE Europe S.r.l. a socio unico:

+39 059 535540 info@laticreteeurope.com

For on-line distributor information, visit www.laticrete.eu.

#### Cost

Contact LATICRETE Europe S.r.l. a socio unico to obtain complete information and cost.

# 7. WARRANTY

The supplier warrants that the product will not deteriorate under normal conditions and use. The warranty validity of one (1) year. Contact Technical Services for further information. See 10. FILING SYSTEM:

DS 230.13EU: 1 Year Product Warranty

#### 8. MAINTENANCE

The long term performance, appearance, and life expectancy of wear surface products are critically dependence upon a good routine maintenance program designed specifically for the installed wear surface. LATICRETE® polyaspartic, polyurethane, and epoxy floor coating systems are nonporous, causing dirt and contaminants to remain on the surface. The use of properly placed walk-off mats, inside and outside, will help increase the life of the floor. Recommend maintenance program consist of frequent and thorough cleaning utilizing a neutral pH cleaner. The frequency of washing will vary depending on floor usage type, traffic and age.

#### 9. TECHNICAL SERVICES

#### **Technical Assistance**

Information is available by calling or emailing the Technical Service Hotline:

+39 059 535540

technicalservices@laticreteeurope.com

### **Technical and Safety Literature**

To obtain technical and safety literature, please visit our website at www.laticrete.eu.

### Warning

The information and the instructions in the data sheet, although based on knowledge gained through years of applications, are indicative. LATICRETE® is unable to directly control the installation methods and conditions of

products and does not assume any liability arising from their implementation. Those who want to use LATICRETE® products should conduct adequate tests to determine the site specifications. Results shown are typical but reflect test procedures used. Actual field performance will depend on installation method and site conditions.

LATICRETE® products are covered by a warranty within the limits of what is established by our general conditions of sale and within the limits of correspondence related to technical specifications and applicable certifications, as expressly indicated in the product data sheets, documentation, or applicable technical documentation.

# **10. FILING SYSTEM**

Additional product information is available on our website at <u>laticrete.eu</u>. The following is a list of related documents:

- DS 230.13EU: 1 Year Product Warranty
- DS 560: LATICRETE® Europe MOISTURE VAPOR BARRIER
- TDS 420: LATICRETE® Floor Maintenance Guide
- TDS 450: Installation Guideline for Installing LATICRETE® Floor Coatings over Existing Tiled Surfaces
- DS 3127: Surface Preparation for LATICRETE® Resinous Flooring