101 Super Guard

UNIGRIP 101 Super Guard is an extreme versatile high-performance, 2K 100% solid epoxy coating engineered to deliver superior corrosion and wear protection in demanding marine and industrial environments. It offers excellent heat resistance and is designed to withstand extreme weather and aggressive chemical exposure.

Key Specifications

- **100 %** solid, solvent and filler free for maximum strength.
- **Strong** bonding to metals and non-metals, including GRE, fiberglass/GRP, and other composite materials.
- **Works** on both dry and moist surfaces.
- **Superior** resistance to corrosion, chemical exposure, and abrasion for long service life. High temperature resistance: up to 180-210°C (356-410°F).
- **Ease of use,** ready-to-use cartridge solutions (dual and single); single-cartridge format fits standard caulking guns-precisely mixed via static nozzles.
- **Marine-safe,** Its safe for marine life "when properly applied and cured".

Availability

UNIGRIP Super Guard Item 101:

- Colour white: 9.0 fl.oz (265ml) single-cartridge
- Colour white: 38.0 fl.oz (1125ml) dual-cartridge
- Colour white: 1.05 gal kit / lbs (4.0 ltr / 5.0 kg)
- Colour white: 4.23 gal kit / lbs (16.0 ltr / 20.0 kg)

UNIGRIP Super Guard Item 102:

- Colour blue: 9.0 fl.oz (265ml) single-cartridge
- Colour blue: 38.0 fl.oz (1125ml) dual-cartridge
- Colour blue: 1.05 gal kit / lbs (4.0 ltr / 5.0 kg)
- Colour blue: 4.23 gal kit / lbs (16.0 ltr / 20.0 kg)

Application Areas

- Storage & Containment: Steel & cement tanks, silos, warehouses
- Structural & Infrastructure: Bridges, pipelines, chemical/pulp & paper plants, amusement parks
- Maritime Vessels & Systems: Hulls, bottoms, thruster tunnels, ballast tanks, seawater pipes, filters, exhausts etc.
- Decks & Superstructures
- Recreational & Specialty: Pools, spas

Product Data Sheet
101 Super Guard

UNIGRIP
DANTECH ELITE COMPOSITES

Description:

UNIGRIP 101 Epoxy Coating is a high-performance, two-component epoxy system engineered for superior corrosion and wear protection in demanding marine and industrial environments. Excellent heat resistance and designed to withstand extreme weather, aggressive chemicals, it is ideally suited for applications such as hulls, thruster tunnels, sea chests, tanks, pipes, structural components, and critical equipment in the marine, offshore, and industrial sectors.
With its robust, high-build formulation, UNIGRIP 101 provides outstanding adhesion, long-lasting durability, and straightforward application—delivering a reliable solution to extend the service life of vital assets, infrastructure, and machinery.

Intended Use (But not limited to):

- Sea chests / strainers
- Rudder systems and hulls
  (To prevent coating damage from hydrogen evolution and blistering, switch off the ship's ICCP system. Always follow the ICCP manufacturer's instructions.)
- Steel and composite pipes and constructions
- Steel and concrete storage tanks
- Scrubber systems
- Heat exchangers
- Turbines
- Pump and valve casings
- Vessel propulsion system
- Steel and composite pipes and constructions

Key Characteristics

- Contains no metallic substrates
- 100% solvent-free formulation
- Resistant to saltwater, a large selection of chemicals, benzine, detergents, oils and greases.
- Excellent adhesion and durability
- Easy to apply by brush, roller, or pneumatic spray
- Strong adhesion to all metallic surfaces which makes the highly suitable for repair of corroded pipes
- Excellent adhesion to cured Glass fiber reinforced epoxy materials (GRE), and other composite materials
- Exceptional resilient adhesive bonding, highly suitable for bonding of dissimilar materials
- High Durability: Offers excellent resistance to corrosion, chemical exposure, abrasion, and erosion.
- Thick Coating Application: Designed for high-build applications, ensuring robust protection in demanding environments.
- Two-Component Epoxy: Provides strong adhesion and a reliable finish suitable for marine, offshore, and industrial use.
- Versatile Use: Ideal for repairing and protecting tanks, pipes, and other equipment exposed to harsh conditions.
- Easy Application: Can be applied by brush, roller, or spray for convenient use in various scenarios.

Benefits:

- Enhanced Equipment Longevity: Protects against corrosion, wear, and chemical damage, prolonging the life of machinery and infrastructure.
- Cost-Effective Maintenance: Reduces repair frequency and downtime, saving time and money.
- Reliable Performance in Harsh Environments: Suitable for demanding conditions in marine, offshore, and industrial applications.
- Versatility: Ideal for a wide range of surfaces, including tanks, pipes, and machinery components.
- Ease of Application: Simple to apply with minimal preparation, ensuring efficiency during repairs or protective coating tasks.
- High impact resistance, Abrasion, heat and chemical resistance.

Packaging:

UNIGRIP 101 available in the following sizes.

- UNIGRIP 101-S-White: 9 fl. oz (265ml) standard cartridge with mixing nozzle
- UNIGRIP 102-S-Blue: 9 fl. oz (265ml) standard cartridge with mixing nozzle
- UNIGRIP 102-M-White: 38 fl. oz (1125ml) dual cartridge with mixing nozzle
- UNIGRIP 101-L-White: 1.05 Gal unit (4.0 ltr unit).
- UNIGRIP 101-XL-White: 4.23 Gal unit (16 ltr unit)

Shelf Life:

- UNIGRIP 101 should be stored out of direct sunlight in dry frost free conditions of temperatures between 5ºC and 20ºC. Under such conditions shelf life will be 36 months from the date of manufacture. One year minimum from date of shipment when stored in original, unopened container in a dry area at temperatures below 75ºF (24ºC).

Instruction for use
101 Super Guard

UNIGRIP
DANTECH ELITE COMPOSITES

Surface Preparation recommendations.

Surface preparations must always be in compliance with clients specifications or job requirements.
Commonly used standards for surface preparations:

Recommended:
SSPC-SP 10/NACE No. 2. ISO 85011-1:1988 (E) (SIS 05 59 00) Sa 2 1/2
Alternative:
SSPC-SP 11 - Power Tool Cleaning to Bare Metal

- Clean and degrease all surfaces, including cut-outs, rat holes and welds shall be rounded to a radius of at least 2 mm, weld splatter removed.
- Weld seams burned, and rusty areas blast cleaned to min ISO-Sa 2½ or power tool cleaned to min **SPSS-Pt3** prior Grit Blasting
- Rough to an angular profile between 75 – 100 microns (in accordance with ISO 8503 parts 1 and 2)
- Abrasive blasting to a cleanliness of white metal (Sa3/SP5) or near-white metal (Sa 2½ /SP10) followed by removal of all abrasive residues.
- The purity of the sandblasting is visual checked.
- Bresle Sampler test for measuring soluble salts / chlorides in the steel surface (ISO 8502-6) limit value <20 mg / m2.
- Distance to Dew Point of minimum 3 degrees Celsius throughout the application process.
- Brush away any loose contamination Degrease with Item 903 UNIGRIP Bio cleaner (Cleaner/Degreaser) or any other effective cleaner which does not leave a residue e.g., methyl ethyl ketone (MEK).

Spray Equipment Preparations

- Spray – Airless or conventional K2 spray equipment recommended for large surface areas.
- Brush – Suitable for stripe coating, edges, welds, and small repairs.
- Roller – For small to medium surfaces and touch-up work; may require multiple coats for full coverage. (We recommend double layer applications- 2 x 7.8 mils / 2 x 200 microns)

Spray Application

- Film Thickness: UNIGRIP 101 can be applied in film thickness from 100-2000 µm per layer. WFT/DFT - The product's film thickness remains consistent in both wet and dry conditions due to its volume-solid properties.
- For achieving the desired thickness of the film, it is advised to apply UNIGRIP 101 in a single or multiple layers application. It is essential to ensure a smooth and continuous paint film without any pinholes. To obtain the desired thickness of the film, use the appropriate nozzle size and maintain a consistent distance of 30-50 cm between the spray gun and the surface.
- Verify that the coating's viscosity is suitable and the spray equipment possesses adequate output pressure and capacity to facilitate effective atomization. Enhancing atomization and film formation can be achieved by preheating the curing agent and base prior to mixing.
- The ideal temperature depends on the desired DFT, nozzle size, and spraying pressure. In the event that a larger nozzle is needed to enhance the spray rate, it may be necessary to heat the coating.
- Apply the coating layer homogeneously and as close to the specification as possible. Control paint consumption to avoid excessive film thickness by measuring wet film thickness or controlling paint consumption.
- It is also recommended to control base and curing agent consumption to keep track of the mixing ratio. The finished coating should have a smooth, glossy surface.
- After application, flush the mixing system immediately with epoxy cleaner during breaks in application longer than half the pot-life, it is recommended to flush the system.

Application by Brush or Roller

Final surface may not appear 100% smooth when using a brush, nevertheless, for small areas and touch-ups, hand tools such as brushes can be used for the application.
It is recommended to apply each coat across the preceding one whenever feasible, following standard painting practices.

We recommend to do testing before the final application.