



PUR-950 TC

Before beginning installation, thoroughly review all product and system information and study the Safety Data Sheets (SDS). Initiate the installation only once you have gained a comprehensive understanding of the product and the system.

Prioritize workplace safety at all times - Personal Protective Equipment (PPE), as specified in the SDS, should be worn and utilized throughout the installation process. Remember, the longevity and performance of the final product hinge on proper surface preparation - the foundation of successful installations.

PRODUCT NAME

PUR-950 TC

PRODUCT DESCRIPTION & USE

The PUR-950 TC, a high-performing, multi-component, UV stable, aliphatic polyurethane top coat for high-traffic floor environments, boasts an impressive 95% solid composition and a low odor profile. This coating is widely recognized for its extraordinary wear resistance.

Besides offering reliable defense against UV radiation, it also provides formidable protection against both chemical damage and corrosion. Therefore, it is frequently the selected solution for a diverse array of flooring environments, particularly within rigorous commercial and industrial settings that require the pinnacle of long-lasting, resilient finishes.

ADVANTAGES & LIMITATIONS

ADVANTAGES

- Provides superior abrasion resistance, ensuring a durable coating.
- Requires minimal upkeep, making it suitable for areas with high commercial traffic.
- Demonstrates exceptional chemical resistance against a wide range of common industrial and domestic substances.
- Environmentally-friendly formulation with low VOC content promoting a healthier environment.

LIMITATIONS

- Deviating from the recommended application technique may lead to the formation of lap lines and an orange peel finish.
- PUR-950 TC doesn't entirely prevent discoloration and fading of non UV-stable coatings and substrates that are overcoated.
- Avoid thinning.
- Over-application or puddling of PUR-950 TC can result in the formation of CO₂ bubbles, poor adhesion, and less than optimal surface properties. Do not apply greater than 100 µm (4 mil)
- Prolonged curing period when applied under dry conditions with a humidity level of 30% or lower. Do not apply when humidity exceeds 80%

COLOUR

Clear coating.





PUR-950 TC

APPLICATION & USE

SURFACE PREPARATION

This product is predominantly employed as a top coat, traditionally applied over an epoxy coating.

For the recoating process of an existing surface, it's crucial to meticulously sand using 200 μm (#70 grit) screens or diamond-embedded tools to establish the ideal surface profile, effectively eliminating all traces of gloss.

To guarantee the best adhesion, it's vital to rigorously clean the intended surface after sanding, ensuring it's devoid of any contaminants. For more detailed instructions and guidance on surface preparation, refer to the "Alluvius Technical Bulletin SP-1".

MIXING GUIDELINES AND PROPORTIONS

Mix four parts of Component A with one part of Component B by volume (4:1 v/v) using a slow-speed drill, keeping the rotation under 200 RPM. Ensure to mix for one minute to achieve a homogeneous mixture, being mindful not to introduce air into the product.

After mixing components A and B, add the third component – Aluminum oxide and resume mixing for 30-60 seconds or until the material is homogeneous. After mixing, transfer the material to an application tray suitable for 460 mm (18") roller.

APPLICATION

Apply PUR-950 TC using a 460 mm (18") roller with a 10 mm (3/8") nap length to apply the PUR-950 TC at a coverage rate of 13.5-18 m² per liter (550-735 sqft/gallon).

Before you start applying the coating, immerse the roller into the coating, rolling off any excess in the tray to prevent drips or uneven application.

Begin by rolling the coating in long, even strokes, starting from left to right, then reversing from right to left. Make sure to frequently re-wet the roller, always maintaining a wet edge for the best results.

During the application, periodically stir the material in the tray to maintain a homogeneous mixture.

To smooth out roller lines, you can adopt a technique of creating 'W' shaped cross strokes or up-and-down passes.

Should the finish seem uneven, re-roll vertically until you achieve a consistent look. The material is quite forgiving, so don't hesitate to re-roll any areas until you're satisfied with the uniformity.

The last step in the application process involves pulling the roller across the entire floor in a single direction without applying any pressure. Repeat this process by overlapping until the entire slab has been re-rolled.

This helps blend in any roller and overlap marks. Bear in mind that the final pass should be completed within 10 minutes of the initial application to achieve the best result.





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COVERAGE RATE

| | COVERAGE RATE (M ² /LITER) | COVERAGE RATE (SQFT/GALLON) | WET FILM THICKNESS (μM) | WET FILM THICKNESS (MIL) |
|-----------------------------------|---------------------------------------|-----------------------------|-------------------------|--------------------------|
| PUR-950 TC with Aluminum Oxide | 13.5 - 18 | 550 - 735 | 75 - 55 | 3 - 2.2 |
| PUR-950 TC without Aluminum Oxide | 12 - 16 | 500 - 660 | 85 - 63 | 3.3 - 2.5 |

RECOATING

PUR-950 TC is designed to serve as a single-coat topcoat. Consequently, additional coats are typically not recommended. Nonetheless, if you opt to apply a subsequent coat of PUR-950 TC, it is advisable to do this within a 24-48 hour period.

It's important to understand that if you wish to apply an additional coat of PUR-950 TC, the previously applied layer will need considerable surface preparation to achieve the necessary texture and to ensure complete de-glossing.

You can attain this level of surface refinement using a floor grinder equipped with #40 to #125 grit metal bond diamonds. Alternatively, a weighted swing sander employing #40 to #125 grit screens can also serve the purpose.

ENVIRONMENTAL CONDITIONS DURING INSTALLATION

The environmental conditions at the time of application must be taken into account. PUR-950 TC should not be applied if the humidity exceeds 80%. The product is suitable for application in temperatures ranging from 15°C (60°F) to 30°C (86°F).

CLEAN UP

Thoroughly clean all tools and materials with solutions or solvents compatible with urethane coatings, such as dibasic ester or xylene where approved. Rigorously wash hands and any exposed skin with warm water and soap.

Any clothing that comes into contact with the product should be promptly removed. Bear in mind that once the product has hardened, it can only be removed mechanically.





PUR-950 TC

PROPERTIES OF MATERIAL

| PROPERTY | VALUE |
|---|-------------------------------|
| Solids By Volume | 93% (+/- 3%) |
| Solids By Weight | 95% (+/- 3%) |
| Part A Density | 1 – 1.10 g/cm ³ |
| Part B Density | 1.07 – 1.17 g/cm ³ |
| Mix Ratio By Volume | 4:1 v/v |
| Volatile Organic Compounds (VOC) ASTM D-2369 | 55 grams per liter |
| Pot Life (Ca. @ 25°C) | 2 hours (5 liter mix) |
| Gelation Time (Ca. @ 25°C) | 20 minutes |
| Dry to Touch Time (Ca. @ 25°C) | 2 hours |
| Recoating Time (Ca. @ 25°C) | Not recommended |
| Open to Light Foot Traffic (Ca. @ 25°C) | 18 hours |
| Open to Heavy Traffic (Ca. @ 25°C) | 48-72 hours |
| Full Cure (Ca. @ 25°C) | 7 days |

RESTRICTIONS

The substrate must be clean, removed of any standing water and free of all contaminants, e.g., dirt, oil, grease, coatings and surface treatments, etc.

STORAGE & PACKAGING

Material is to be stored from 10°C (50°F) to 35°C (95°F) and away from direct sunlight. Materials are best used within 12 months of the date of manufacture if kept in original sealed containers.

PUR-950 TC is available in 5 liter (1.33 gallon) kits. Kits include 4 liters (1.06 gallon) Part A and 1 liter (0.27 gallon) Part B.





PUR-950 TC

DISPOSAL

Please be aware that product containers will hold residual amounts of product and must be handled with care. Adhere to the warnings detailed on the labels at all times. All containers must be disposed of following federal, state, and local regulations to ensure responsible waste management.

HEALTH & SAFETY PRECAUTIONS

Please refer to the Safety Data Sheet (SDS) for detailed instructions on handling PUR-950 TC safely.

- When mixing and applying, make sure to wear chemically-resistant gloves, eye protection, approved respiratory equipment, and suitable protective clothing, as specified in the latest version of the SDS.
- It's essential to maintain a well-ventilated workspace and avoid inhaling any fumes.
- Be aware that PUR-950 TC Part A and B can cause skin sensitization. If you come into contact with the product, immediately wash the affected area with warm, soapy water and change out of any contaminated clothing. Seek medical attention immediately if symptoms of dermatitis occur.
- To ensure compatibility, it's advisable to conduct a small-scale test of PUR-950 TC on the actual job site before full application.

ADDITIONAL NOTES

- The specifics provided for working time, cure time, and coverage should not be considered absolute; they are subject to change based on site conditions
- We strive to provide typical values to be used as a reference

DISCLAIMER

The data provided in this technical document is a culmination of our laboratory testing and practical experience. However, this document does not constitute a guarantee for the product's properties in terms of any legally stipulated warranties. Should you need further clarification or information to make an appropriate assessment, we encourage you to reach out to us directly.

All Alluvius products are manufactured according to strict specifications, and while we can vouch for the quality of the product itself, we do not control the conditions under which the products are transported, stored, or handled, and we cannot predict or oversee the conditions under which they will be used.

Therefore, we strongly advise each user to study this product data sheet in light of their intended handling and usage of the product and to conduct comprehensive tests before adapting the product for their specific uses.

Please note that we reserve the right to alter the provided data without any prior notice.

