

TECHNICAL DATA: APU 47

APU 47 2 Component Photo Stable Clear Polyurethane Coating / Sealer

Mix Ratio

By Weight 100 Part A : 55 Part B

Application Conditions

Minimum 10 °C, air and substrate temperature up to a maximum of 30 °C. Humidity must not exceed 75 %.

The floor temperature may be 3 °C maximum, less than the surrounding temperature to exclude a dew point situation on the surface and on the fresh coating (see Dew Point Calculator).

Working Time:

| | | | |
|-------------|-----------------|-----------------|----------------|
| Temperature | 10 °C | 20 °C | 30 °C |
| Time | 10 - 15 minutes | 10 - 12 minutes | 5 – 10 minutes |

Cure Schedule:

| Temperature | 10 °C | 20 °C | 30 °C |
|----------------------------|---------------------|-----------|-----------|
| Light Foot Traffic @ 0.6mm | 10 - 12 hrs | 4 - 8 hrs | 2 – 4 hrs |
| Tack free | 4 - 6 hours @ 20 °C | | |
| Light Mechanical Load | 24 hours @ 20 °C | | |
| Full Chemical Resistance | 2 days @ 20 °C | | |

Re Coat window:

5 – 9 hours but within 48 hours @ 20 °C

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Application Rate: 0.4 – 1.0Kg / m²

As a sealer on Quartz and Flake floors : 0.4Kg – 1.00Kg / m²

As a Coating with or without RMP : 0.4Kg – 0.8Kg / m²

As a high gloss sealer : 0.4Kg – 0.6Kg / m²

1 kg Yield at prescribed Film Thickness of 0.4Kg / m² is 2.3m²

Package Size: Available in 10kg units, larger units available by special order.

Shelf Life: 12 months in unopened containers. **Must be protected from freezing.**

Storage: Store product at normal room temperature, 20 °C before using. Storage should be between 15 °C and 32 °C.

Product Description:

- APU 47 is an high quality, 2 component, clear, Polyurethane coating for smooth floors such as our Reflective Metallic flooring System.
- APU 47 is based on solvent free environmentally friendly technology and offers an excellent alternative to solvent based coatings. It is designed be used as a stand-alone coating on to a prepared and primed sub base, or as a sealer for areas requiring a high gloss coating.
- Due to the smooth finish of APU 47 it is used for areas that demand a high impact visual appearance such as domestic applications and show rooms.
- With excellent free-flow and smoothing properties, APU 47 is applicator friendly. The cured coating is suitable for wet areas and offers good resistance too many liquids including water, salt solutions, diluted bases, acids, mineral oil and also chemicals used in floor maintenance as well as common cleaning fluids. Please ask for our technical advice.
- APU 47 is non yellowing, this means that the product is ideal for visually demanding areas and light coloured floors.

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Product features:

- Solvent free
- Non yellowing
- Rapid setting
- Environmentally friendly
- Abrasion resistant
- Low odour
- User Friendly easy application
- Water resistant

Applications

- As a sealer for light pigmented coatings.
- As a carrier of Achtis Groups Reflective Metallic System.
- Domestic Kitchens, Bathrooms, Bedrooms and Living areas.
- Commercial areas requiring a high gloss coating.
- As a sealer for quartz and flake systems.

Surface Preparation:

Prior to application we recommend that the substrate is mechanically prepared to ensure that all dirt, oil, dust, foreign contaminants, laitance and any previous poorly adhered coatings are removed to ensure a trouble free bond to the substrate. The substrate to be coated has to be levelled, dry and free of dust and must have adequate tensile and compressive strength.

A moisture test should be carried out to ensure that the substrate moisture pressure is within acceptable tolerances for epoxy and polyurethane products. The possibility of moisture ingress from below must be permanently excluded. The prepared surface must be primed accurately, saturated and free of pores. If the substrate hasn't been sealed completely bubbles and pin holes may appear because of rising air. Conduct a trial if in doubt. To increase adhesion you may scatter the base-coat-surface with approx. 0.5 - 1.0 kg/m² kiln dried quartz sand, 0.3 - 0.7 mm sieve.

Mixing

APU 47 is a two component product. Part A should be pre mixed then thoroughly mixed for a minimum of two minutes with Part B using a low speed drill and mixing paddle, to ensure uniform consistency. Avoid air entraining the product. Always ensure thorough mixing as improper mixing may result in product failure.

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We recommend that the mixed product is decanted into a clean mixing bucket and re mixed briefly to avoid spreading of un-mixed product from the walls of the mixing vessel. If only part of a kit is to be used pre mix the individual components then **decant precise amounts by weight only.**

Application

- Immediately after mixing pour the material onto the substrate, at the approximate weight required per square metre and spread with a notched squeegee or trowel to the required film thickness. Always maintain a wet edge between batches.
- Alternatively the product maybe roller applied with a high quality shed resistant roller cover. However it should be noted that no roller cover is completely shed resistant so on visually demanding floors it is best to apply the product with a notched trowel.
- Immediately after application the coating may be spiked rolled to remove any air, optimize leveling and improve adhesion.
- Maintain temperatures and humidity within the recommended ranges during the application and during the curing process. Fresh polyurethane coatings are susceptible to humidity. Direct sunlight or high temperatures will reduce working time and may lead to blisters. **The surface must be dry** before the application of this product.
- Restrict access to the floor for 24 hours then to light traffic and avoid the use of chemicals and water until the coating is fully cured (2 days).
- Sealing APU 47 should be carried out with clean Shoe in Pro overshoes, do not enter the surface with either spiked or blunt epoxy overshoes.

Top coat options: After 24 hours but before 48 hours

- Micro Sol Polyurethane, coverage 6 to 8 m² / Kg
- Micro Sol + Polyurethane, coverage 6 to 8 m² / Kg

Important Note: Application of APU 47 onto EP 70FS must be carried out after 4 – 8 hours but before 24 hours.

PRODUCT PERFORMANCE DATA

| | | |
|------------------|------------------|----------------|
| Viscosity | Components A + B | 1200 mpas |
| Solid Contents | | 99 % |
| Density | Components A + B | 1.1 kg / litre |
| Water Absorption | | < 0.2weight % |
| Taber Abrasion | | 28 mg loss |
| Shore-Hardness D | | 66 |

Limitations

- Caution! Some cleaners may affect the colour of the floor installed. Test each cleaner in a small area, utilizing your cleaning technique. If no ill effects are noted, you can continue to clean with the product and process tested.
- Designed for floors with light traffic from material handling equipment.
- Colour or gloss may be affected by humidity, temperatures, chemical exposure and application thickness.
- Slab on grade requires moisture barrier.
- All new concrete must be cured for at least 28 days.

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CE

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APU 47

EN 13813:2003-01

Synthetic resin screed mortar
EN 13813: SR-B1.5-AR0.5-IR10

| | |
|---------------------------|---------------------|
| Fire behavior | E _{fl} -S1 |
| Emission of corrosive | SR |
| Wear resistance BCA | AR 0.5 |
| Adhesive tensile strength | B 1.5 |
| Impact resistance | IR 10 |

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