# STRATUM EPU

UV resistant polyurethane resin flooring system



# **DESCRIPTION**

**STRATUM EPU** is multi-component, low solvent-content aliphatic polyurethane flooring system formulated specially to be abrasion and chemical resistant for screed or concrete floors achieving 200 microns per coat, **STRATUM EPU** provides excellent resistance to UV light, and non-yellowing.

# **USAGES**

- Outdoor & indoor car parks
- Industrial hard-wearing flooring and workshops
- · Chemical industries flooring
- Vehicle ramps, helipads, and walls
- Other similar applications

# **TECHNICAL DATA**

# **ADVANTAGES**

- UV stable
- Good abrasion & slip resistant surface
- Surface anti-slip roughness control by adding or broadcasting silica-sand if needed
- Hygienic, anti-bacterial & fungus growth
- Resistant to a wide range of industrial chemical and fuels
- · Waterproof and dustproofing
- Easy to clean
- Available in different colors (Standard Grey & Blue)
- Cost effective

STRATUM EPU	Typical values	USAGE INSTRUCTIONS
Mixed Appearance	Clear/ colored Liquid	
		1. Surface preparation
Solid Content	52±2 %	All substrates shall be sound, clean, free from dust, grease & oil, dirt, the concrete wet substrates should be spongedried to remove all free surface water.
Mixed Density @25°C (ASTM D1475)	1.20 ± 0.02 kg/lit	And in case resin-based flooring or primer were applied more than 3 days prior to application of <b>STRATUM EPU</b> , it is recommended to abrade the substrate with emery paper or grinder to provide a mechanical key prior to
Pot life @25°C (ASTM D2471)	60 – 120 min	application.
Touch Dry @25°C	4 hours	Concrete floors should have compressive strength not less than 25 MPa. and if new concrete floor, it must be over 28 days old before applying any resin-based product.
(ASTM D2471)  FUll Cure Time @25°C (ASTM D1640)	7 days	Any cracks or grooves should be filled using <b>PIOMORTAR FC</b> before priming.
		2. Priming
Overcoating Interval @35°C	10 – 16 hours	Apply one coat of <b>PIOPRIME 38</b> or <b>PIOPRIME 62</b> depending on concrete porosity, ensure that the surface
Tensile Strength @7days (ASTM D2370)	< 3.0 N/mm²	to be primed is clean, dry and free from oil, grease or other contamination.

# **STANDARDS**

**STRATUM EPU** is formulated to comply with all requirements of ASTM D16.

STRATUM EPU	Coverage
PIOPRIME 38	9 m²/ liter
STRATUM EPU	5 m²/ liter/200μ



All coverage rates given are theoretical and subject to actual site conditions. We recommend trial areas are done to establish a practical estimation to material consumption.

#### 3. Mixing

Stir component A only separately, then the entire content of component B could be poured into the Component A container, both should be mixed at lease for 1-2 minutes using mechanical mixer (drill mixer). Insufficient mixing may lead to color variation and bubble formation.

#### 4. Application

Transfer the mixed material into a suitable container for application, apply material using a short pile roller to achieve the required film thickness, it is recommended to apply two coats within 24 hours.

#### 5. Cleaning

Clean all tools and application equipment with a suitable thinner immediately after use.

Hardened or cured material can only be removed mechanically.

# CHEMICAL RESISTANCE

STRATUM EPU	Concentration
Chlorine	100%
Kerosene	100%
Gasoline	100%
Nitric Acid	40%
Sulphuric Acid	50%
Ammonia (Salt Water)	30%
Acetic Acid	30%
Detergents	100%
Alum	100%
Formic acid	40%
Hydrochloric Acid	50%
Phosphoric Acid	20%
Sodium Hydroxide	50%
Soda Solution	100%

# **PACKAGING**

**STRATUM EPU** is supplied in 20 kg set, component A & B.

## LIMITATION

Don't apply **STRATUM EPU** if;

- The temperature of the surface is below 5 °C or over 40 °C
- The flooring concrete compressive strength is less than 25 MPa
- The flooring concrete moisture content must be less than 4%

# **HEALTH & SAFETY**

Before applying **STRATUM EPU**, all safety protections should be worn during application, such as safety googles and rubber gloves to avoid any harmful accidents.

If **STRATUM EPU** is splashed to skin, it must be washed off by water and soap at once, and if to the eyes seek medical attention immediately.

# **STORAGE & SHELF LIFE**

**STRATUM EPU** shall be stored in its sealed container under dry and shaded place in a temperature from  $5^{\circ}\text{C}$  - $35^{\circ}\text{C}$ , shelf life of the material is 12-months.



#### **TECHNICAL SERVICE**

The technical service department of Arkaz is available to assist in the correct and best use of our products, these resources and advice are at your disposal entirely without obligation.

Please contact:

concretedoctor@arkaz.com

### **LEGAL DISCLAIMER**

The information given is based on data and knowledge considered to be true and accurate and is offered for the user's consideration, investigation and verification. Since the conditions of use are beyond our control, we do not warrant the results to be obtained. Please read all statements, recommendations or suggestions in conjunction with our conditions of sale including those limiting warranties and remedies which apply to all goods supplied by us. No statement, recommendation or suggestion is intended for any use which would violate or infringe statutory obligations or any rights belonging to a third party.

These products may be covered by patents or patents pending.



Copyright 2021 Printed in K.S.A. Version 2.1 15-July-2021

