Self-Levelling Epoxy

RENGA SL

Solvent-free · Self-levelling · Two-component epoxy floor coating

PRODUCT DESCRIPTION

A solvent-free, self-levelling epoxy floor coating with high mechanical strength and chemical resistance.

FEATURES

- High chemical resistance.
- Resistant to friction and abrasion.
- Creates a seamless surface.
- Easy to clean, hygienic and low-maintenance over a long period.
- Easy to apply; solvent-free.

AREAS OF USE

Applied in factories, warehouses, shopping centres, workshops, aircraft hangars, schools, hospitals, the pharmaceutical and food industries, laboratories, car parks, treatment plants, and areas with heavy forklift traffic or corrosive chemicals.

TECHNICAL PROPERTIES

PROPERTY	VALUE	STANDARD
Number of components	2	
Density (mixed, 20 °C)	1.45 ± 0.05 g/cm³	TS EN ISO 2811-1
Solids content (mixed)	100% by weight	
Hardness (7 days)	75–80 Shore D	
Mixing ratio (A/B)	19/5 (by weight)	
Pot life	30–40 minutes at 23 °C / 200 g	DIN 16945
Thinning	Not to be thinned	
Consumption	1.5 kg/m² per 1 mm thickness	
Compressive strength	~50 N/mm²	EN 196
Flexural strength	~25 N/mm²	EN 196
Adhesion strength (concrete)	> 3 N/mm²	EN 1542 · EN ISO 4624
Abrasion resistance (Taber, CS10/1000/1000, 8 days / 23 °C)	70 mg	DIN 53109

APPLICATION

Concrete surfaces. The concrete must be clean and sound, with a compressive strength above 25 N/mm² and a tensile strength above 1.5 N/mm²; at least class C25, preferably C30–C35. Clean the surface of oil, grease, dirt, mortar residues and dust with pressurised water; the cement laitance must be removed with abrasive equipment (shot blasting, etc.) to obtain an open-pored surface. Roughen very smooth surfaces by milling or sandblasting; open cracks in a V shape and clean them.

Steel surfaces. For best performance, blast clean to Sa 2½; prime with a zinc dust or zinc phosphate epoxy primer at the required dry film thickness.

Application conditions. Surface, ambient and material temperature between +10 °C and +30 °C; concrete moisture max. 4%; relative humidity max. 80%; floor temperature at least 3 °C above the dew point.

Mixing. Homogenise component A with a low-speed mixer (300–400 rpm); add component B and mix continuously for 2 minutes. Avoid over-mixing to reduce air entrainment.

Application. Check relative humidity and dew point. Spread the mix with a notched trowel, then go over it with a spiked roller to release entrapped air. Use the prepared mix within 40 minutes at the latest. Repairs and levelling are carried out at least 8 hours after the epoxy primer has been applied.

Important notes. Do not apply on surfaces with rising moisture. Protect the fresh coating from moisture, condensation and water for at least 24 hours. Use products from the same batch number in one area for colour consistency. If the area is to be heated, use electric systems; fossil-fuel heaters spoil the surface appearance. Bring materials to the application area 1–2 days in advance to acclimatise. At low temperatures the reaction slows down, and viscosity and consumption increase.

CHEMICAL RESISTANCE

CHEMICAL	RESISTANCE
Sulphuric acid (H_2SO_4) 10%	3
Sulphuric acid (H_2SO_4) 20%	3
Hydrochloric acid (HCl) 10%	3
Hydrochloric acid (HCl) 20%	3
Nitric acid (HNO_3) 10%	3
Nitric acid (HNO_3) 20%	2
Sodium hydroxide (NaOH)	3
Xylene	3
Ethyl alcohol	3
Solvents	3

3: Highly resistant · 2: Resistant · 1: Not resistant

PACKAGING AND STORAGE

Packaging	24 kg kit · A: 19 kg + B: 5 kg
Storage	Between +15 °C and +25 °C, in a dry, cool, well-ventilated enclosed warehouse, in its unopened original packaging; lids must be closed and label information complete. Follow the first-in, first-out rule.
Shelf life	12 months

HEALTH AND SAFETY

Follow the warnings on the packaging. Ensure adequate ventilation during application; wear a mask and gloves. Avoid direct contact and do not breathe vapours; keep away from open flames. For detailed information, refer to the product's safety data sheet (SDS).

The information in this technical data sheet is based on Renga Plus laboratory experience and field applications and applies to the product as of the date of publication. As substrate, weather and application conditions affect product performance, the information is a general guide; the suitability of the product for its intended purpose must be assessed by competent persons before each application. Renga Plus reserves the right to change its products without notice; a new edition of this data sheet supersedes all previous editions. Confirm the current edition at rengaplus.com or with our technical team. For handling, storage, first aid and personal protection information, refer to the product's safety data sheet (SDS).