

Ressi EPO GripShield is a superior two-component epoxy resin coating system specifically designed for concrete and cementitious flooring surfaces. Upon curing, it achieves a glossy, durable, and anti-skid finish, with an application thickness ranging between 300 to 1000 microns. This high-performance epoxy flooring solution is engineered to deliver exceptional chemical resistance and slip resistance, making it ideal for environments that demand rigorous protection against chemical exposure and safe floor traction.

Key applications for **Ressi EPO GripShield** include laboratories, pharmaceutical manufacturing facilities, chemical processing plants, food and beverage production areas, warehouses, and garages. These settings require flooring that can withstand spills, splashes, and various chemical exposures while providing anti-skid properties, ease of maintenance, and long-lasting durability.

The formulation of **Ressi EPO GripShield** incorporates Bisphenol A-based liquid resins with high solids content and a modified cycloaliphatic amine, ensuring a high-performance and nonylphenol-free product. Furthermore, this epoxy system is completely solvent-free, promoting a safer and more environmentally friendly application process. **Ressi EPO GripShield** is also compatible with a variety of substrates, including concrete, metal, wood, ceramics, selected plastics, and other suitably prepared surfaces.

ADVANTAGES

- ✓ Provides high-level protection and durability, ensuring long-lasting performance in demanding industrial environments.
- ✓ Hygienic, impervious finish offers a surface that is easy to clean and maintain over time.
- ✓ Excellent bond strength to concrete and steel, ensuring a secure and reliable adhesion.
- ✓ Highly resistant to a broad spectrum of industrial chemicals, protecting against potential damage.
- ✓ Can be applied using brush, roller, or spray for versatile and convenient application options.

SURFACE PREPARATION

Surfaces to be coated must be clean, dry, sound, free of mold release agents, bond breaking coatings, curing compounds, or any other form of contamination that may affect the adhesion of the epoxy flooring to the substrate. Surface preparation must be done using appropriate methods like grinding or wire brushing and vacuumed. All loose concrete should be removed until a sound substrate is reached. Various Ressichem Epoxy Compatible repairing materials can be used to repair the floor cracks and some uneven surfaces prior to the application of **Ressi EPO GripShield**. New Cementitious surfaces should be at least 28 days old and have a moisture content less than 5% prior to application.

PRIMING

If the surface is highly porous and rough textured, priming is recommended. Ressi EPO Primer or a suitable primer from the Ressichem range is recommended to be used in conjunction with **Ressi EPO GripShield**. The primer should be brushed into the substrate using a stiff brush or roller and allowed to dry before the application of . In case of extremely porous substrates, two coats or more coats of primer are recommended. Allow the first coat of **Ressi EPO Primer** to dry before the application of the second coat.

MIXING

Ressi EPO GripShield is supplied in premeasured quantities. Base and hardener should be stirred separately before mixing. Both the components should be mixed using a slow speed drill machine fitted with a paddle mixer for 4 to 6 minutes to get a uniform liquid mix. Scrape the sides, edges and bottom of the mixing container using a spatula and continue mixing for a further 2 minutes.

APPLICATION

The mixed epoxy should be applied to the prepared and primed surface using a suitable application tool, such as a brush, roller, or spray equipment. It is essential to apply the epoxy evenly to avoid pooling or uneven thickness, which could compromise the coating's integrity. When using a brush or roller, apply the epoxy in a crisscross pattern to ensure thorough coverage and to eliminate air bubbles. The ambient temperature during application should be between 10°C and 35°C, with relative humidity below 80%. Avoid applying the epoxy in direct sunlight or in areas with strong wind or drafts, as these conditions can affect the curing process. After proper application, protect the coated surface from dust, debris, and foot traffic for at least 48 hours to ensure proper curing. Full chemical resistance and mechanical strength will be achieved after 7 days. Regular maintenance, such as sweeping and occasional washing with mild detergent, will help prolong the lifespan of the **Ressi EPO GripShield** coating.

PACK SIZE

Ressi EPO GripShield is available in the following packaging.

1.2 KG:	Part A 1 KG Part B 200g
12 KG:	Part A 10 KG Part B 02 KG
24 KG:	Part A 20 KG Part B 04 KG

SHELF LIFE

12 Months from date of manufacture when stored under warehouse conditions in original unopened packaging. Extreme temperature / humidity may reduce shelf life.

TECHNICAL PROPERTIES

Appearance	-	Colored medium viscosity
Color	-	As per shade card provided (Please refer to shade card for color reference)
Mix Ratio (Part A: Part B)	-	100: 20
Mix viscosity (cPs)	Theoretical	3000 - 5000
Mix Density g / cc	ASTM D 1475	1.48 g / cc
Coverage per KG @ 500 Micron Thickness	-	12 - 16 SFT @ 500-micron thickness
Working time	-	40 - 60 minutes
Tack Free time	-	4 - 6 Hours (24 Hours if average temperature is below 25°C)
Time until foot traffic	-	48 Hours
Full Cure Time	-	7 days (14 Days if average temperature is below 25°C)
Flexural Strength (MPa)	ASTM D790	77 @ 7 Days
Compressive Strength (MPa)	ASTM D695	98.0 @ 7 Days

Note: At 40°C pot life will half so application should be planned accordingly.
Typical Results under Laboratory Conditions

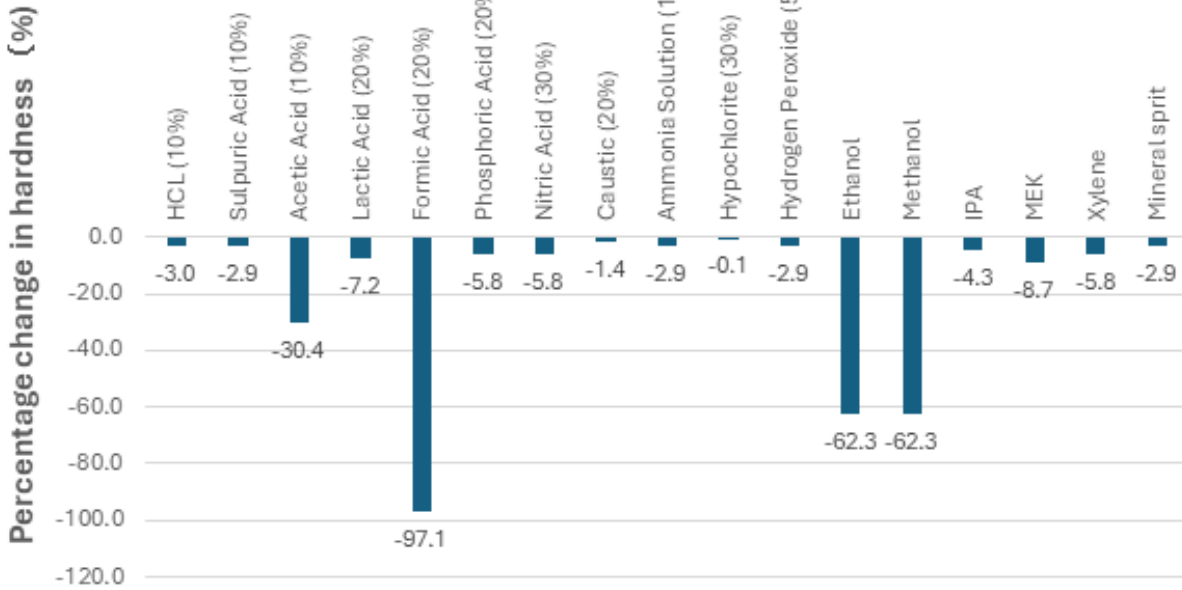
CHEMICAL RESISTANCE CHART

Chemicals Solutions	Chemical Resistance
HCL (10%)	★★★★
Sulphuric Acid (10%)	★★★★
Acetic Acid (10%)	★★
Lactic Acid (20%)	★★
Formic Acid (20%)	NR
Phosphoric Acid (20%)	★★
Nitric Acid (30%)	★★
Caustic (20%)	★★★★
Ammonia Solution (18%)	★★★★
Hypochlorite (30%)	★★★★
Hydrogen Peroxide (50%)	★★★★
Ethanol	★
Methanol	★
IPA	★★★★
MEK	★★
Xylene	★★★★
Mineral Spirit	★★★★
KEY ★ (Fair) ★★ (Good) ★★★★ (Excellent) NR (not Recommended)	

HEALTH & SAFETY

The Packed material if **RESSI EPO GripShield** is regarded as non-hazardous for transportation. Once Opened, Extreme temperatures may cause flammability. Do not reuse bags or containers and dispose them off as per local rules and regulations. Gloves and suitable masks can be worn during application. Please Refer to the MSDS of the product for further health and safety information.

Immersed in Chemicals for 7 Days at 25°C



Immersed in Chemicals for 7 Days at 25°C

