RESSI EPO CHEM PLUS

Three Component chemical resistant Epoxy Flooring

RESSICHEM®
adding life and value to your property

Ressi EPO chem plus is a high build three component solvent free Epoxy Flooring specially designed for its application in areas where a high chemical resistance to a variety of chemicals and minor resistance to heat is required over the flooring surface. **Ressi EPO Chem Plus** is specifically designed using highly modified Bisphenol A Based Resins along with a clear modified aliphatic amine-based curing agent which is free from Nonyl phenol. The Filler portion of **Ressi EPO Chem Plus** is Designed using A Special Grade Silica Filler Material. **Ressi EPO chem plus** is also compatible with a variety of other stable substrates such as wood, metal, fiberglass and selected plastics.

ADVANTAGES

- **Excellent Chemical Resistance:** Offers robust protection against a wide range of chemicals, ensuring longevity and safety of flooring.
- **More Durable compared to conventional Epoxy Coating and floorings:** Provides enhanced durability, making it more resistant to wear, tear, and mechanical impacts.
- **Can resist high temperatures up to 90°C:** High thermal stability allows it to withstand extreme temperatures without degrading or losing effectiveness
- **Compatible with a variety of different substrates:** Adheres well to surfaces like wood, metal, fiberglass, and selected plastics, ensuring versatile application
- **Solvent free and VOC Free Formulation:** Environmentally friendly composition with no volatile organic compounds, ensuring healthier indoor air quality.

AREAS OF APPLICATION

Industrial Manufacturing Plants: Ideal for flooring subjected to heavy equipment, forklifts, and frequent mechanical impacts.
Warehouses and Distribution Centers: Provides a robust, wear-resistant mi coat surface for high-traffic areas.
Automotive Workshops and Garages: Resistant to oils, fuels, and chemicals typically found in automotive service environments.
Food and Beverage Facilities: Suitable for areas requiring hygienic, durable, and seamless floors.
Chemical Processing Units: Performs well in spaces exposed to mild chemical spills and corrosive agents.
Pharmaceutical Plants: Ensures a smooth, non-dusting surface, reducing contamination risks.
Power Plants and Utility Areas: Protects surfaces from mechanical and thermal stresses.
Public Spaces and Parking Garages: Offers high durability for areas exposed to heavy vehicular traffic and pedestrian footfall.
Cold Storage Areas: Performs well in environments with temperature fluctuations and low ambient temperatures.

TECHNICAL DATASHEET RESSI EPO CHEM PLUS

Educational and Commercial Buildings: Provides durable, easy-to-maintain surfaces in hallways, lobbies, and utility areas.

Chemical Labs: Provides protection from chemical spillages and its easy to clean ability makes it an ideal solution.

SURFACE PREPARATION

Surfaces should be free from grease, oil chemical, dust, laitance, loose concrete and should have minimum amounts of moisture. Appropriate surface preparation equipment such as shot blast, Scarified or grinder must be used to obtain a sound surface. Substrates which show any traces of oil must be degreased with a chemical degreaser prior to any surface preparation or grit blasting. Cracks, pinholes, potholes should be repaired using **Ressi EPO Crack Fill** or a suitable crack filler from Ressichem. Uneven concrete should be levelled to produce flat surfaces as much as possible. New concrete floors should be atleast 28 Days old prior to application and must not have moisture exceeding 4% using a standard moisture meter. Expansion, control and isolation joints should be carried through floors filled with suitable joint treatment. The concrete surface needs to be primed using an appropriate epoxy primer from the Ressichem Epoxy primer range.

PRIMING

Prepared surfaces should be primed using **Ressi EPO Primer** or any other suitable Primer recommended by Ressichem. The primer should be penetrated / coated onto the substrate using a still brush or roller and allowed to become tacky (10 – 20 mins before the application of **Ressi EPO Chem Plus**. The primer should be allowed to dry. The dried primer area should be dust free prior to the application of the Top coat of **Ressi EPO Chem Plus**.

MIXING

Stir the base and hardener component separately first. Add the Filler component into the base / Hardener material and stir it until the complete material is homogenous. A high-speed drill machine with high RPM levels can be used to homogenize both Part A (base / Resin) and Part C (Filler Material). Once Parts A and C are homogenized, part B should be added into the mix and homogenized accordingly. All Materials should be mixed for at least 3 to 7 minutes a low rpm (400 – 600 rpm) Speed until a uniform homogenized mix is achieved.

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APPLICATION

Lay **Ressi EPO Chem Plus** over the prepared surface whilst the primer is still tacky. Spread out with a notched trowel to a uniform thickness between 2mm to 4mm. The minimum recommended thickness of **Ressi EPO Chem Plus** is 2mm. Level the material using appropriate trowels and tools to the desired level. A spiked roller should be used to achieve a uniform surface.

LIMITATIONS

At higher temperatures pot life will be reduced. For working on Low temperatures below 10°C, **Ressi EPO Chem Plus** may be placed over a hot water bath. The service temperature for the application of **Ressi EPO Chem Plus** is between 15°C and 35°C.

PACK SIZE

Ressi EPO Chem Plus Is available in the following packaging.

2.7 KG Pack :	Part A 1 KG Part B 350g Part C 1.35 KG
13.5 KG Pack :	Part A 05 KG Part B 1.75 KG Part C 6.75 KG
27 Pack :	Part A 10 KG Part B 3.5 KG Part C 13.5 KG
54 KG Pack :	Part A 20 KG Part B 07 KG Part C 27 KG

HEALTH & SAFETY

Personal Protection: Wear appropriate personal protective equipment (PPE), including gloves, goggles, and respiratory protection, during mixing and application.

Ventilation: Ensure proper ventilation in enclosed or poorly ventilated spaces during application to avoid exposure to fumes.

Spills and Disposal: Handle spills immediately using absorbent material and dispose of waste in accordance with local regulations.

ریسیکیم®
مضبوطی اور پائیداری کے لئے
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www.ressichem.com

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TECHNICAL TABLE

Property	Test Method	Result
Component	-	Three : Part A: Base Part B: Hardener Part C: Filler
Mixed form	-	Viscous liquid
Color	-	Various colors available
Mix ratio (Part A : Part B : Part C)	Theoretical	100 : 35 : 135
Mix Density	ASTM D 145	1.6 ± 0.5 g /cc
Pot life (300g mix) @ 25°C	-	35 – 60 minutes
Drying time	-	5 – 6 hours
Recoat time	-	10 – 24 hours (Depending upon nature of substrate)
Full Cure	-	7 Days
Coverage per kg material @ 1 mm thickness	-	6.0 – 7.0 SFT
Flexural Strength (MPa)	ASTM D 790	33.7 @ 7 Days
Compressive Strength (MPa)	ASTM D 695	79.6 @ 7 Days

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

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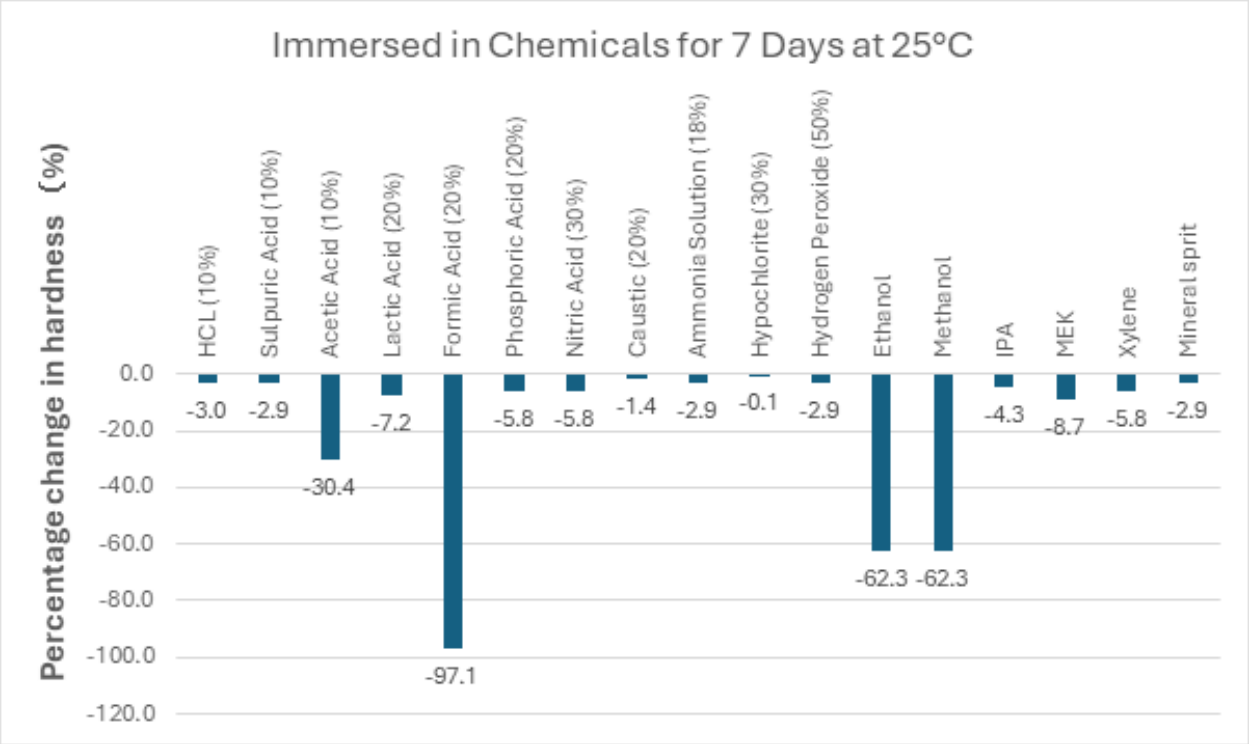
CHEMICAL RESISTANCE CHART

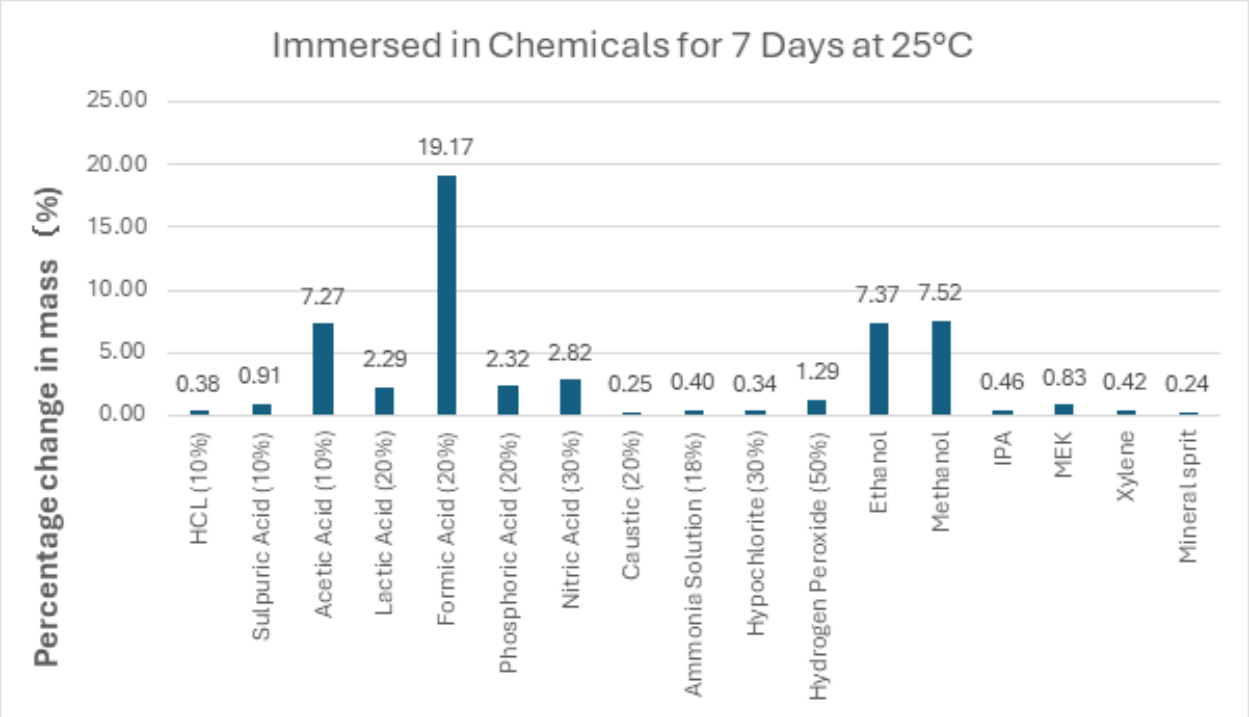
Chemicals Solutions	Chemical Resistance
HCL (10%)	★★★
Sulphuric Acid (10%)	★★★
Acetic Acid (10%)	★★
Lactic Acid (20%)	★★
Formic Acid (20%)	NR
Phosphoric Acid (20%)	★★
Nitric Acid (30%)	★★
Caustic (20%)	★★★
Ammonia Solution (18%)	★★★
Hypochlorite (30%)	★★★
Hydrogen Peroxide (50%)	★★★
Ethanol	★
Methanol	★
IPA	★★★
MEK	★★
Xylene	★★★
Mineral Spirit	★★★

KEY
★ (Fair)
★★ (Good)
★★★ (Excellent)
NR (not Recommended)

TECHNICAL DATASHEET RESSI EPO CHEM PLUS

CHEMICAL RESISTIVITY TABLE





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NOTE:

If printed packaging not available, neutral packaging with label. Lot number and manufacturing date to be stamped at the back of each packaging.

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