

**ResSI EPO Roll Coat** is a solvent free, two-part food grade epoxy tank lining coating system. It is also suitable as an epoxy paint for vertical wall surfaces in various industrial applications.

## USES

ResSI EPO Roll Coat can be applied to steel and concrete internal tank surfaces to provide corrosion resistance, protection against oils, chemical wastewater, etc. it can also be used as waterproofing for tanks and reservoirs containing water intended for human consumption. Other areas of application include silos, wastewater treatment plants, canning and bottling units, food processing plants, etc.

## ADVANTAGES

- ✓ Solvent free, high build, nontoxic.
- ✓ Does not support algae, fungal growth.
- ✓ Suitable for use in confined areas and potable water tank applications.
- ✓ Excellent resistance to seawater and solvents.
- ✓ Suitable for old and new concrete surfaces
- ✓ Corrosion, chemical and abrasion resistant.

## TYPICAL PROPERTIES @ 25°C

Property	Test Method	Value
Component	–	Two: Part A Base (1 Part) Part B Hardener (0.4 Part)
Mixed Form	–	Liquid
Color	–	Various colors Refer to shade card
* Pot Life	ASTM D2471	35 mins ± 10mins
* Recoat Time	–	Minimum 8 hours and maximum 24 hours
* Full Cure	–	7 Days
* Bond Strength	ASTM D4541	> 1.5 N/mm <sup>2</sup>
* Water Resistance	ASTM D870	Nil
* Water Penetration	BS EN 12390-8	Nil
* Chemical Resistance	ASTM D 548	Resistant to various chemicals like mild acids, alkalis, fuels, grease, petrol, etc. Please refer to the chemical resistance chart for further details.
* Application temperature	–	+5°C to +40°C
* Service temperature	–	+5°C to +70°C

\*Typical results under laboratory conditions

## SURFACE PREPARATION

**Steel:** The base metal should be roughened and preferably shotblasted with grit. Where shot blasting is not possible pre-treatment may be carried with tap hammers, rotary wire brushes or by flame scaling. Cleaning with solvent or a strong detergent is advisable to ensure the surface is free from grease, oil, paint, and other contaminants. Ressi EPO Roll Coat must be applied before the oxidation of steel occurs. Surface defects revealed by the blast cleaning process, should be treated in an appropriate manner with a suitable repair mortar within the Ressichem patch series of material. Patch Epoxy 111 (Epoxy based repair mortar) can also be used for its repair.

## CONCRETE / CEMENTITIOUS SURFACES:

Concrete and cementitious surfaces must be dry, clean, and free from mold, oil, curing compound, dirt, grease, oil, or excessive laitance. Surface should be prepared by suitable mechanical means. To provide an open pore surface. Cracks, pinholes, potholes, etc. should be routed out and repaired with a suitable epoxy-based crack / void filler. Ressi EPO Crack Fill is a suitable crack filler recommended for such applications. Uneven concrete surface should be levelled to produce a roughened flat surface. Undulated floors can be levelled / repaired using Ressi SLS 610, Ressi PFS 620 or Ressi EPO FS 5000 prior to application of Ressi EPO Roll coat. All internal corners should be covered using patch 365 plus or a suitable polymer modified repair mortar from the Ressichem range of products. Sharp edges should be rounded off. New concrete floors must be at least 28 days old prior to application. Moisture content of concrete surfaces must be less than 5%.

## MIXING

Ressi EPO Roll Coat is supplied in premeasured packs. Bases and hardeners should be stirred separately before mixing. After stirring individually, transfer base into mixing container, mix for a minute. Add hardener component and mix using a slow speed drill machine fitted with a paddle mixer for two minutes to get a uniform mix. Scrape the sides, edges and the bottom of the mixing container using a spatula and continue mixing for further 1 minute.

## APPLICATION

Ressi EPO Roll Coat mixed as above can be applied using a suitable squeegee, stiff nylon brush or roller. Work the material into the surface to ensure total absorption into the substrate. Finish off using a medium to long nap roller.

Make sure that the required application rates are achieved to ensure minimum dry film thickness per coat. Spray application is also a preferred method to accurately obtain the required dry film thickness.

Minimum of 2 coats should be applied to achieve the desired performance. Prior to the application of each coat the surface should be examined for signs of pinholes, cavities etc. where pinholes are apparent these can be filled using either Ressi EPO Crack Fill or Patch Epoxy 111 Repair Mortar. The second coat should be applied at right angles to the first to get the desired dry film thickness. Second coat should be of different color than that of the coat.

For large water tank areas where coating is expected to undergo high pressure, it can be strengthened by using 3 coats and fiber glass mesh. Consult Ressichem for details.

## APPLICATION THICKNESS

Minimum of 400 microns DFT in 2 coats for walls  
Minimum of 500 microns DFT in 2 coats for floors

## LIMITATIONS

At higher temperature pot life will be reduced. For working in cold climates (<5°C) Ressi EPO Roll Coat Containers need to be kept in hot water bath. Ressi EPO Roll Coat cannot be applied in areas exposed direct to sunlight.

## CHEMICAL RESISTIVITY CHART

Chemical	Resistance
Acetic Acid 99%	NR
Acetic Acid 33%	1 day
HBr 47%	Excellent
HCl 12%	Excellent
Nitric Acid 57%	NR
Nitric Acid 19%	Excellent
Sulfuric Acid 98%	NR
Sulfuric Acid 33%	Excellent
ECH 50% in water	NR
DETA 50% in water	1 day
Toluene	Excellent
Petrol	Excellent
Lactic Acid	Good
Sodium Hydroxide 50%	Excellent
Water at 70°C	Excellent
Sodium Chloride 30%	Excellent
Methanol	NR
MEK	NR
MIBK	Excellent

**Key:**  
 Excellent: < 5% 80-day mass change  
 Good: 5-10% 80-day mass change  
 1-day: < 10% 1-day mass change  
 No Resistance: > 10 % 1-day mass change

## PACK SIZE

Ressi EPO Roll Coat is available in the following pack sizes:

<b>1.4 KG</b>	<b>Part A 1 KG</b> <b>Part B 400g</b>
<b>14 KG</b>	<b>Part A 10 KG</b> <b>Part B 04 KG</b>
<b>28 KG</b>	<b>Part A 20 KG</b> <b>Part B 08 KG</b>

## COVERAGE

5m<sup>2</sup>/Ltr/coat at 200-micron thickness.

Actual coverage rates may vary according to the substrate porosity and texture, wastage factors, site, and application conditions, etc. it is advisable to apply the material in a small area where it is to be applied to get a general idea of material coverage.

## SHELF LIFE

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

## HEALTH AND SAFETY

Gloves goggles & suitable masks can be worn. Do not reuse containers, dispose them off as per local rules and regulations. Please refer to the product MSDS for further health and safety information.