

TECHNICAL DATA SHEET

FERONIX RCCSHIELD

RCC CHEMICAL RESISTANT PROTECTIVE COATING



100% SOLIDS

SOLVENT FREE

TWO COMPONENT Si-PU CHEMICAL RESISTANT

WATERPROOF

HEAVY DUTY

LONG-TERM PROTECTION FOR RCC & CONCRETE

A premium, 100% solids, solvent-free, two-component Silicone Modified Polyurethane (Si-PU) coating developed for long-term chemical protection of reinforced cement concrete surfaces.

Plot no 24 B-Wing Green Villa-3 Appar NAGPUR (URBAN) NAGPUR, Nagpur 440013
Website: feronixpaints.com Phone: +91 983 44 392 00 Email: feronixpaints@gmail.com

FERONIX RCCSHIELD

(RCC CHEMICAL RESISTANT PROTECTIVE COATING)

PRODUCT HIGHLIGHTS

- Direct-to-RCC application — no primer required
- Dense, seamless and impermeable protective barrier
- Excellent resistance to strong acids, alkalis, industrial chemicals and wastewater
- Excellent scratch, impact and abrasion resistance
- Smooth, semi-gloss, hydrophobic and easy-to-clean finish
- 4:1 two-component mix ratio

PRODUCT OVERVIEW:

FERONIX RCCSHIELD is a premium, 100% solids, solvent-free, two-component Silicone Modified Polyurethane (Si-PU) coating designed for long-term chemical protection of reinforced cement concrete (RCC) surfaces. It forms a dense, seamless and impermeable barrier against strong acids, alkalis, aggressive industrial chemicals and wastewater in direct contact.

PRODUCT DESCRIPTION:

The coating is designed for RCC floors, walls, tanks, pits, bunds, drains and other concrete structures in severe industrial environments. It provides excellent adhesion, mechanical strength and long service life. Part A and Part B are mixed at 4:1 and applied directly to RCC/concrete without a primer.

KEY BENEFITS:

- No primer required.
- Semi-gloss, smooth, waterproof, hydrophobic and easy-to-clean finish.
- Solvent-free, low VOC and 100% solids.
- Outstanding chemical, scratch, impact and abrasion resistance.
- Excellent adhesion and mechanical strength.
- Two-component 4:1 mix ratio.
- Long service life of 02*– 03* years as stated in the reference.

RECOMMENDED APPLICATION:

Chemical processing plants	Acid & alkali storage areas	ETP/STP tanks	Neutralization pits	Battery rooms	Fertilizer plants
Food & beverage industries	RCC chemical tanks	Process floors	Refineries	RCC walls	Power Plants
Pharmaceutical plants	Concrete foundations	Distilleries	Containment bunds		

TECHNICAL DATA SHEET

Parameter	Specification
Product Type	100% solids, solvent-free, two-component Si-PU coating
Components	Part A (Base Colour) + Part B (Hardener)
Mix Ratio	4:1 (04 kg Base + 01 kg Hardener)
Colour	Blue, Green, Grey, Yellow & Tile Red; limited colours available
Finish	Semi-Gloss
Solids	100% by volume
Flash Point	>100°C
Viscosity	225 sec
Density	1.10 g/cc
Chemical Resistance	Excellent resistance to direct contact with industrial chemicals & wastewater
Scratch / Abrasion	Excellent
Impact / Wear	Excellent
Pot Life	30–40 minutes
Touch Dry	2–3 hours at 27°C
DFT	350–400 µm per coat; 700–800 µm in 02 coats
Coverage	45–50 Sq. Ft. area per kg
Recommended Coats	02 coats recommended
Recoating Interval	Minimum 12 hours
Full Curing	24 hours for hardness; 72 hours for full chemical-resistance cure
Application	Roller, Brush, Airless Spray
Shelf Life	12 months
Pack Size	800 gm Base + 200 gm Hardener OR 04 kg Base + 01 kg Hardener

APPLICATION PROCESS

STAGE 1	STAGE 2	STAGE 3	STAGE 4	STAGE 5
Surface Cleaning	Surface Preparation	FERONIX RCCSHIELD	Recoat ≥ 12 Hours	Full Chemical Cure 72 Hours

APPLICATION METHOD

Mix Part A and Part B at 4:1 and apply by roller, brush or airless spray within the 30–40-minute pot life. Two coats are recommended with a minimum 12-hour recoating interval.

AVAILABLE PACK SIZE

800 gm Base + 200 gm Hardener and 04 kg Base + 01 kg Hardener.

STORAGE, SAFETY & PRECAUTIONS

STORAGE CONDITIONS

Store in the original, tightly sealed containers in a cool, dry and well-ventilated area. Protect from direct sunlight, excessive heat, frost, moisture and contamination.

RECOMMENDED STORAGE

Parameter	Recommendation
Storage Temperature	Refer product label / SDS
Storage Area	Cool, Dry & Well Ventilated
Container Condition	Keep Tightly Closed
Sunlight Exposure	Avoid Direct Sunlight
Moisture	Protect from Water & Humidity
Shelf Life	12 Months

HEALTH & SAFETY PRECAUTIONS

- Read the SDS/MSDS before handling.
- Wear Safety Gloves, Safety Goggles, Protective Clothing and Safety Shoes.
- Use an Organic Vapour Respirator where ventilation is inadequate.

SAFE HANDLING PRACTICES

- Use only in well-ventilated areas.
- Avoid inhalation of vapours or spray mist.
- Avoid contact with eyes, skin and clothing.
- Do not eat, drink or smoke while handling.
- Wash hands thoroughly after use.
- Keep containers tightly closed.
- Keep away from ignition sources, sparks and open flames.

FIRST AID MEASURES

Eye: rinse with clean water for at least 15 minutes.

Skin: wash with soap and water.

Inhalation: move to fresh air. Ingestion: do not induce vomiting unless directed by medical personnel; seek medical attention.

FIRE FIGHTING MEASURES

- Dry Chemical Powder
- Carbon Dioxide (CO₂)
- Foam
- Water Spray for cooling surrounding containers only

Firefighters should wear appropriate protective equipment and self-contained breathing apparatus where necessary.

DISPOSAL

Dispose of unused product, empty containers and contaminated materials in accordance with applicable local environmental regulations. Do not discharge coating into drains, watercourses or soil.

DISCLAIMER

The information contained in this Technical Data Sheet is based on laboratory evaluations, product development data, and practical application experience available at the time of publication. Actual product performance may vary depending on substrate condition, surface preparation, application method, environmental conditions, maintenance practices, and service environment.

Users are responsible for determining the suitability of the product for their intended application and should carry out representative trials where necessary.

FERONIX SURFACE SOLUTIONS reserves the right to revise product specifications and this Technical Data Sheet without prior notice as part of its ongoing product development program.