

REC COAT SEWER GUARD 679 SE

EPOXY MODIFIED PAINT WITH HYDROCARBON RESINS FOR ANTI-ACID PROTECTION OF CONCRETE AND STEEL SURFACES

DESCRIPTION

REC COAT SEWER GUARD 679 SE is a high-performance, epoxy-modified protective coating formulated with hydrocarbon resins to provide long-lasting anti-acid and chemical resistance on both concrete and steel surfaces. Designed for demanding industrial environments, it forms a tough, impermeable barrier that protects substrates exposed to aggressive agents such as acids, alkalis, oils, and solvents.

PRIMARY APPLICATIONS

For the protection of sewage treatment plants, cisterns and concrete sewer pipes in contact with aggressive chemicals such as acids, alkalis, hydrocarbons, detergents and sewage.

Some application examples

- Anti-acid protection of sewage treatment tanks.
- Anti-acid protection of sewer mains.
- Coating of recycling tanks for oils and hydrocarbons.
- Safety reserve tanks.
- Drain wells.
- Anti-corrosive coating of sandblasted steel surfaces.
- Protection of reinforced concrete and steel exposed to salt air.
- Protection of the outer face of concrete joists on bridges and viaducts.

FEATURES/BENEFITS

- High Chemical & Acid Resistance – Formulated with epoxy and hydrocarbon resins to protect surfaces from strong acids, alkalis, oils, and industrial chemicals.
- Exceptional Adhesion – Bonds firmly to concrete, steel, and mineral substrates, ensuring long-term performance even under harsh conditions.
- Durable, Abrasion-Resistant Finish – Withstands mechanical wear, heavy traffic, and industrial impact, extending the lifespan of coated surfaces.
- Impermeable Protective Barrier – Prevents penetration of moisture, corrosive agents, and contaminants, reducing structural deterioration.
- Corrosion Protection for Steel – Shields metal surfaces from oxidation and chemical corrosion, improving safety and structural reliability.
- Easy & Versatile Application – Can be applied by brush, roller, or spray, making it suitable for various project needs and environments.
- Fast Curing & Reduced Downtime – Allows quicker return to service, minimizing operational interruptions in industrial settings.
- Suitable for Indoor & Outdoor Use – Maintains strength and stability under changing weather, chemical exposure, and demanding industrial conditions.

TECHNICAL INFORMATION

REC COAT SEWER GUARD 679 SE is a two-component epoxy modified paint based on hydrocarbon resins and special admixtures manufactured to a formula developed in the Reckon Research Laboratories. Once it hardens completely, **REC COAT SEWER GUARD 679 SE** is resistant to acids, alkalis, salts, oils, and hydrocarbons, as shown in Table 1.

The hardened **REC COAT SEWER GUARD 679 SE** film is designed for contact with sewage and can be used for the protection of sewage treatment tanks and sewer mains.

REC COAT SEWER GUARD 679 SE is also resistant to frost and sunlight, and creates a vapour barrier.

REC COAT SEWER GUARD 679 SE complies with the principles defined by EN 1504-9 standards ("Products and systems for protecting and repairing concrete structures: definitions, requirements, quality control and conformity assessment).

General principles for the use of products and systems”) and the requirements of EN 1504-2 coating (C) according to principles PI, MC, RC and IR (“Concrete surface protection system s”).

PRODUCT IDENTITY		
	Component A	Component B
Consistency:	fluid paste	fluid paste
Density:	1.75 g/cm ³	1.4 g/cm ³
Brookfield viscosity:	15,000 mPa·s (N° 5 needle - 10 revs)	3,500 mPa·s (N° 4 needle - 20 revs)
Dry solids content:	100%	100%

APPLICATION DATA (at +23°C - 50% R.H.)	
Mixing ratio:	component A : component B = 1 : 1
Consistency of mix:	fluid
Colour of mix:	Black, white or grey
Density of mix:	1,560 kg/m ³
Brookfield viscosity of mix:	3,600 mPa·s (needle 6 - revs 20)
Application temperature range:	from +5°C to +38°C
Pot life (EN ISO 9514):	50 minutes
Hardening time:	5-6 hours
Waiting time between first and second layer:	6-24 hours
Final hardening time:	7 days

FINAL PERFORMANCE DATA			
Performance characteristic	Test method	Requirements according to EN 1504-2 coating (C) principles PI, MC, RC and IR	Product performance
Permeability to CO ₂ :	EN 1062-6 (sample preparation according to prEN 1062-11)	S _D > 50 m	500 m
Permeability to water vapour:	EN ISO 7783-1	Class I S _D < 5 m Class II 5 m ≤ S _D ≤ 50 m Class III S _D > 50 m	5 m ≤ S _D ≤ 50 m Class II
Capillary absorption and permeability to water:	EN 1062-3	W < 0.1 kg/m ² ·h ^{0.5}	0.01 kg/m ² ·h ^{0.5}
Resistance to thermal shock:	EN 13687-5	≥ 1 MPa	3.5 MPa
Resistance to severe chemical attack Class II: 28 days without pressure	EN 13529	reduction in hardness less than 50% when measured using the Shore method according to EN ISO 868, 24 hours after removing the coating from immersion in the test liquid	no alteration. Opacification with a 10% acetic acid and 20% sulphuric acid solution
Direct tensile adherence test (MC 0.40 type substrate) according to EN 1766:	EN 1542	for rigid systems with no traffic: ≥ 1.0 MPa	3.5 MPa (after 7 days)

Reaction to fire:	EN 13501-1	Euroclass	E
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CHEMICAL RESISTANCE OF REC COAT SEWER GUARD 679 SE AT +23°C		
CHEMICAL PRODUCTS	CONTACT	
	CONTINUOUS	INTERMITTENT
Water	+	+
Acetic Acid 10%	-	+
Hydrochloric Acid 90%	+	+
Lactic Acid 10%	-	+
Nitric Acid 10%	-	+
Nitric Acid 50%	-	-
Oleic Acid 10%	-	+
Caustic Soda 30%	+	+
Sodium Hypochlorite (64 g/l of active chlorine)	+	+
Sulphuric Acid 50%	-	+
Diesel oil	-	+
Ethyl Alcohol	-	-
Xylene	-	-
Toluene	-	-
<i>+ Excellent resistance – Poor resistance</i>		

DIRECTIONS FOR USE

PREPARATION OF THE SUBSTRATE

Substrates must be thoroughly clean, solid, and dry. Completely remove loose materials, dust, traces of formwork, release agents, paints and varnishes by sandblasting.

Fill any cracks and repair degraded sections with the products from the REC grout and repair mortar line. Seal and level any irregularities in the substrate with REC Repair Mortar.

REC COAT SEWER GUARD 679 SE should be applied after the substrate and any repairs made with cement-based mortars have completely cured.

For steel surfaces always sandblast with silica sand graded up to SA 21/ or clean mechanically (ST3).

PREPARATION OF THE PRODUCT

REC COAT SEWER GUARD 679 SE's two components must be mixed together. Pour component B (hardener) into component A (resin) and mix at low speed with a mechanical stirrer until completely homogenized.

Avoid using partial quantities of material from the package in order to prevent measuring errors that could interfere with the complete hardening of **REC COAT SEWER GUARD 679 SE**.

APPLICATION OF THE PRODUCT

REC COAT SEWER GUARD 679 SE can be applied using conventional techniques, brush, roller or spray, In

at least two coats. Wait from 6 to 24 hours between coats, depending on ambient conditions.
 If the viscosity must be lowered to facilitate spray applications, dilute **REC COAT SEWER GUARD 679 SE** with 5-10% of rec solvent.
 If **REC COAT SEWER GUARD 679 SE** is used to protect the outer face of concrete joists on bridges and viaducts, the product must be applied at a rate of at least 2 kg/m² and distributed in several layers on the surface using traditional techniques or with a squeegee.
 Immediately after applying **REC COAT SEWER GUARD 679 SE**, the surface must be sprinkled with dry sand with a suitable grain size to help the next layer form a better grip.

MAINTENANCE

Surfaces treated with **REC COAT SEWER GUARD 679 SE** can be cleaned with water and detergent.

CLEANING

Clean brushes, rollers and spraying equipment (airless) before **REC COAT SEWER GUARD 679 SE** hardens using REC CLEANER.

CONSUMPTION

0.4-0.45 kg/m² for a thickness of approximately 250 µm.

RECOMMENDATIONS

Do not use **REC COAT SEWER GUARD 679 SE** on damp surfaces.
 Do not dilute **REC COAT SEWER GUARD 679 SE** with water. For spray applications, rec solvent may be used as needed.
 Do not use **REC COAT SEWER GUARD 679 SE** when rain threatens.
 Apply **REC COAT SEWER GUARD 679 SE** at a temperature +3°C higher than the dew-point temperature.
 Do not use **REC COAT SEWER GUARD 679 SE** at temperatures below +5°C.
 Do not use **REC COAT SEWER GUARD 679 SE** on friable, damp or dusty substrates.
 Do not use **REC COAT SEWER GUARD 679 SE** on substrates subject to rising damp (consult RECKON's Technical Services Department).

PACKING

REC COAT SEWER GUARD 679 SE Available in 10, 20, and 40 kg kits

SHELF LIFE

Store **REC COAT SEWER GUARD 679 SE** for 12 months in its original, closed packaging in a dry place, far from sources of heat and open flames, at a temperature of between +5°C and +30°C.

WARRANTY: The Reckon Chemicals (Pvt) Ltd. (Reckon) solely and expressly warrants that its products shall be free from defects in materials and workmanship for one (1) year from the date of purchase. Unless authorized in writing by an officer of Reckon, no other representations or statements made by Reckon or its representatives, in writing or orally, shall alter this warranty. Reckon MAKES NO WARRANTIES, IMPLIED OR OTHERWISE, AS TO THE MERCHANTABILITY OR FITNESS FOR ORDINARY OR PARTICULAR PURPOSES OF ITS PRODUCTS AND EXCLUDES THE SAME. If any Reckon product fails to conform with this warranty, Reckon will replace the product at no cost to Buyer. Replacement of any product shall be the sole and exclusive remedy available and buyer shall have no claim for incidental or consequential damages. Any warranty claim must be made within one (1) year from the date of the claimed breach. Reckon does not authorize anyone on its behalf to make any written or oral statements which in any way alter Reckon's installation information or instructions in its product literature or on its packaging labels. Any installation of Reckon products which fails to conform with such installation information or instructions shall void this warranty. Product demonstrations, if any, are done for illustrative purposes only and do not constitute a warranty or warranty alteration of any kind. Buyer shall be solely responsible for determining the suitability of Reckon's products for the Buyer's intended purposes.

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