

## **TRI-SEAL 307**

**Flexible Protective and Water-proofing coat.**

### **Description**

**TRI-SEAL 307** is a two-component, polymer-modified cementitious coating designed to provide long-lasting waterproofing and concrete protection. It forms a flexible, crack-bridging film that resists both positive and negative hydrostatic pressure. Once cured, it becomes an integral part of the concrete surface, offering superior adhesion, resistance to chlorides, sulfates, and carbonation. The system is safe for potable water, easy to apply by brush, roller, spray, or trowel, and suitable for both new and existing structures.



### **Standard compliance**

**The product is certified by National Organization for Potable water & Sanitary Drainage.  
The product is certified by National Research Center.**

- ASTM C307
- ASTM C321
- ASTM C580
- BS 6920

### **Typical uses**

- Potable and non-potable water tanks, desalination and sewage units.
- Basements, foundations, and retaining walls.
- Bridges, tunnels, and marine structures.
- Swimming pools, water features, and elevated reservoirs.
- Wet areas such as bathrooms, kitchens, and plant rooms.
- Concrete roofs, balconies, and podium decks (with protective topping).
- Machine foundations and electrical rooms exposed to moisture.
- Repair of honeycombs, cracks, and porous concrete surfaces.

### **Advantages**

- Withstands both positive and negative hydrostatic pressure
- Highly flexible—bridges hairline cracks and structural movements.
- Strong bond to concrete and masonry substrates.
- Excellent resistance to chlorides, sulfates, and industrial chemicals.
- Safe for potable water and fully solvent-free.
- Easy to mix and apply by brush or spray with excellent workability.
- Long-term durability even under saline or aggressive environments.
- Compatible with dual waterproofing systems for extra protection.

**Technical properties @°25c**

Color	Grey and white
Application Temperature	Not less than 5 °C
Tensile Strength	3.85 N/mm <sup>2</sup>
Adhesion strength	1.28 N/mm <sup>2</sup>
Hardness test (Shore D)	90
Flexural Strength	13.17 N/mm <sup>2</sup>
Bond Strength	2.4 N/mm <sup>2</sup> CONCRETE FAILURE
Compressive strength	33.02 N/mm <sup>2</sup>
Pull off strength	1.13 N/mm <sup>2</sup>
Crack bridging test after 28 days	0.5 mm NO failer
Water permeability after 28 days	5 Bar
Water Vapour transmittance	W.V.T = 93.2 g/hm <sup>2</sup>
Chemical resistance	
CL	No effect
NaOH 40 gm / L °C	No effect
NaOH (So4)212 H2o @ 23 °C	No effect
NaOH (So4)212 H2o @ 60 °C	No effect

**Recommended water-proofing systems .**

Waterproofing system I	TRI-SEAL 307	Waterproofing Coat 1
	TRI-SEAL 307	Waterproofing Coat 2
Waterproofing system II	TRI-SEAL 307	Waterproofing Coat 1
	TRI-SEAL 307	Waterproofing Coat 2
	ACRYPROOF	Finish Coat
Waterproofing system III	TRI-SEAL 307	Waterproofing Coat 1
	TRI- FLEZ 70	non-woven needle punched polypropylene
	TRI-SEAL 307	Waterproofing Coat 2

**Directions for use**
**Surface preparation**

- All surfaces should be dry and free from contamination such as oil, grease, loose particles De-cayed matter, laitance, all traces of mold release and curing compound.
- This is best achieved by lightly grit-blasting the surface.
- It is essential that all surfaces to be treated or be soaked with clean water prior to application.

**Application**

- While the surface is still damp, apply the mixed product to the well-prepared concrete or masonry surface using a brush, broom, or spray.
- Apply two coats as required, ensuring each coat is applied perpendicular to the previous one.
- In case of heavy-duty or severe exposure conditions, a third coat may be applied to enhance performance and durability.

### Mixing

- Pour the liquid part in a bucket then add the powder gradually and mix with suitable Electrical mixer till getting suitable consistency.
- Small quantities can be mixed by hand in a bucket.
- Large quantities can be mixed by Mixer.

### Curing

- After application, the coating must be protected from rapid drying caused by high temperature, wind, or direct sunlight.
- Premature drying may lead to surface cracking or reduced adhesion.
- Curing should be carried out by maintaining a damp environment for at least 3 - 4 days, either by light water misting or covering with polyethylene sheets to retain surface moisture.
- Avoid direct water pressure or flooding during this period.

### Protection

- Once cured, the coating shall be protected against mechanical impact, abrasion, or long-term exposure to UV radiation.

### Notes

- The coating should be applied in two coats to achieve a total dry film thickness of not less than 2mm.
- Areas subjected to light foot traffic should receive minimum 2mm thickness and an additional 2mm coating should be applied to areas of moderate to heavy pedestrian conditions .

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### Coverage

- **TRI-SEAL 307** : 25 kg / 12 -15 m<sup>2</sup>

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### Package

- **TRI-SEAL 307** : Package 25 Kg Bags

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### Shelf life

- 12 months in good storage conditions .

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### Storage conditions

- Store the material in a cool, dry and covered place.
- Temperature should not exceed 35 °C.
- Do not expose the pails to direct sunlight and keep away from all sources of heat.

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### Cleaning

- All tools should be cleaned with water immediately after use.
- Hardened material can be removed mechanically.

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### Technical support

- For any technical support, please contact TRI-CHEM technical office or representatives.

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### Sustainability and environmental accountability

- TRI-CHEM's Environmental sustainability is the accountability to conserve natural resources and protect global ecosystems to support health and well-being for this a more positive approach is that accountability guides the actions of power-holders towards more socially and environmentally sustainable results.

### Health and safety responsibility

- Workplace health and safety is all about sensibly managing risks to protect TRI-CHEM's workers and business.
- ISO 45001 is a systematic health and safety management is characterized by strong leadership involving managers, workers, suppliers, contractors and customers and also health and safety management is an essential part of the movement towards sustainable development.
- Spillages should be washed down immediately.
- PPE in accordance with the health and safety rules should be used during the materials application.
- For irritant effects of the non-cured material, avoid contact with skin and eyes during storage and application.

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### Institutional Excellence and quality performance

- Institutional excellence in TRI-CHEM refers to achieving high levels of performance, quality and effectiveness in all aspects of TRI-CHEM company's work, it involves a systematic and continuous effort to improve an organization's performance by applying best practices, innovative approaches and evidence-based strategies, institutional excellence spans various areas, such as training , research, innovation, community engagement, governance, management and sustainability, and involves setting high standards, measuring performance against these standards and continuously improving performance to meet or exceed these standards, excellence in TRI-CHEM also includes a culture of continuous improvement and learning, where everyone in the organization is committed to achieving the organization's goals, working together to find solutions to challenges and opportunities, and requires a collaborative approach that includes all stakeholders.
- All products originating from TRI-CHEM facility are manufactured under a quality management system independently certified to conform the requirements of the quality standards ( ISO 9001:2015).

### Disclaimer

- While TRI-CHEM guarantees its products against defective materials, the use and application of these products are made without guarantee since the conditions of their application are beyond its control.
- TRI-CHEM is recommended to verify with TRI-CHEM that the product is suitable for the intended use, and that this data sheet version is the latest one.
- Any specification, recommendation or information mentioned in this product data sheet is (to TRI-CHEM's best knowledge) true and reliable.
- However, because TRI-CHEM has no influence on the application method of these products and the care taken, the company cannot accept any liability arising from the use of its products.
- TRI-CHEM's warranty is therefore limited to the quality of the materials supplied which are guaranteed against defective materials.
- TRI-CHEM may modify it without prior notice and technical characteristics are listed for guidance only.

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