

TRI-COAT CM

Protective and water-proofing coating for concrete and masonry

Description

TRI-COAT CM comprises a two component polymer modified cementations coating with specially selected cements graded Hard wearing sand and additives supplied in powder form together with a liquid component of blended co-polymers and wetting agents supplied in ready to mix kits.

TRI-COAT CM can be simply applied by stiff brush, roller spray or trowel to obtain the desired texture.



Standard compliance

The product is certified by National Research Center.

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

Typical uses

- **TRI-COAT CM** to protect atmospherically exposed reinforced concrete structures from attack by acid, gases, chloride ions, oxygen and as a waterproofing.
- The product is also suitable to protect other cementitious substrates and masonry for new and existing structures.

Advantages

- Water proof - suitable for water retaining structures.
- High resistance to the effects of long term weathering.
- Durable in all climatic conditions including UV attack.
- Flexible with similar expansion similar to concrete .
- Covers honeycombed and pitted poured concrete effectively.
- Good abrasion resistance.
- Waterproof coating for water tanks and reservoirs.

Technical properties @°25c

Color	Grey - white other color on request
Density	2 ± 0.1 kg / L
Compressive Strength ASTM C307	3.84 N/mm ²
Flexure Strength ASTM C580	11.99 N/mm ²
Bonding Strength ASTM C321	1.77 N/mm ²

Important Clarification

The above advantages apply mainly to rigid concrete structures with minimal movement. If structural movement or cracking greater than 0.5 mm is expected, use an elastic or crack-bridging waterproofing system (flexible grade) **TRI-SEAL 307 OR TRI-SEAL 307 Elastic**.

Chemical resistance

Chemical resistance	
CL	No effect
NaOH 40 gm / L	No effect
NaOH (SO ₄) ₂ 12 H ₂ O @ 23 °C	No effect
NaOH (SO ₄) ₂ 12 H ₂ O @ 60 °C	No effect

Recommended water-proofing systems .

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

Directions for use

Surface preparation

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

TRI-COAT CM.

Mixing

- Pour Component B (liquid polymer) into a clean container and gradually add Component A (powder) while continuously mixing using a low-speed (400–600 rpm) mechanical mixer until a smooth, homogeneous, lump-free slurry is obtained.
- For small quantities, manual mixing may be carried out using a trowel or hand paddle.
- Avoid excessive mixing speed to prevent air entrapment.
- Recommended mixing ratio : 5 kg liquid : 25 kg powder (as supplied).
- Mixed material should be used within 45 minutes under standard conditions

Application

- Apply the mixed products to the well prepared surface of concrete or masonry by stiff brush and apply one or two coats as required.
- By Spraying or troweling applications can be used.

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 24 hours, 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.
- If the system will remain externally exposed (e.g. roofs, balconies, open tanks), apply a protective screed, UV-resistant coating, or tile finish to prevent carbonation and spalling risks over time.
- Before back filling or applying tile adhesive, ensure a minimum of 3 days curing and check the integrity of the waterproof layer.

Execution Note:

- Proper substrate preparation is essential to achieve strong adhesion and watertight performance. Weak, dusty, or contaminated surfaces may lead to localized detachment or leakage failure.

Coverage

- 30 kg / 12-15 m² - for 2 mm d.f.t

Package

- **TRI-COAT CM** Package = 30Kg consists of (Powder =25Kg + liquid = 5Kg).

Shelf life

- 12 months in good storage conditions .

Storage conditions

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

Cleaning

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

Technical support

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

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-holder 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.

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.