

Technical Data Sheet

Protectosil® WA CIT

Water based corrosion inhibiting admixture

PRODUCT DESCRIPTION

Protectosil® WA CIT is a waterborne emulsion which is based on a multifunctional silane system specially designed to protect embedded steel rebars against corrosion caused by chlorides. As part of the concrete mix design, Protectosil® WA CIT is homogeneously distributed throughout the concrete, thereby offering an effective protection against chloride induced corrosion.

Typical Properties

Property	Unit	Value
Appearance		white liquid
Active Content	wt%	50
Density DIN 51757 (@20 °C)	g/cm ³	1.0
pH Value (@20 °C)		9.5-11.5

The data represents typical values (no product specification)

TYPICAL APPLICATIONS

Protectosil® WA CIT is preferably designed for

- steel reinforced concrete
- prefabricated concrete elements
- two component concrete repair mortars according to EN 1504-2 or EN 1504-7
- shotcrete
- building materials which are exposed to high chloride environments, such as sea water or de-icing salts (e.g. marine constructions, harbours, parking garages, tunnel or highways)

BENEFITS & ADVANTAGES

Protectosil® WA CIT

- chemically bonds to rebar surface and cement matrix
- effectively protects embedded steel reinforcement against chloride induced corrosion
- reduces the drying shrinkage of concrete

DOSAGE

The recommended dosage of Protectosil® WA CIT in concrete is in the range of 1.0 – 2.0 % based on the cement weight in the concrete mix design. In terms of other cement based materials such as e.g. dry mix mortar we recommend to use 0.2 - 0.5 % by mass on the total dry formulation.

HANDLING & PROCESSING

Protectosil® WA CIT should be added directly to the concrete mixture during the mixing procedure. It is highly recommended to check interaction with other auxiliaries or additives in advance.

Studies performed at the Swiss Society for Corrosion protection have proven Protectosil® WA CIT to be highly effective in protecting steel reinforced concrete against corrosion. In addition to that, Protectosil® WA CIT decreases the drying shrinkage of concrete. In some cases Protectosil® WA CIT can slightly decrease the early strength development of concrete, but this effect levels off over time.

SAFETY

Before considering the use of Protectosil® products please read its Safety Data Sheet (SDS) thoroughly for safety and toxicological data as well as for information on proper transportation, storage and use.

The Safety Data Sheet is available on our website <https://silanes.evonik.com/en> or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL sds-hu@evonik.com.

PACKAGING

Protectosil® WA CIT is supplied in 25 kg PE-canisters, 200 kg steel drums with PE inliner and 920 kg (IBC) containers.

STORAGE

The product should be stored at temperatures between 3 °C and 40 °C. Do not allow material to freeze.

SHELF LIFE

Protectosil® WA CIT has a shelf life of at least 12 months if stored in originally sealed containers.



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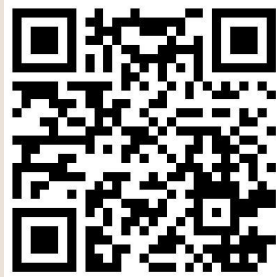
Protectosil® WA CIT
Water resistant admixture for concrete

Chloride ion content	max 0,1% by mass
Alkali content	max. 0,5% by mass
Corrosion behavior	passed
Compressive strength	passed
Capillary water absorption	passed
Air content	passed

Registration Listings

Registry	Status
Australia (AICIS)	No
Canada (DSL)	Information upon request
China (IECSC)	Information upon request
EU (REACH)	Yes
South Korea (KECL)	No
Philippines (PICCS)	Yes
United States of America (TSCA)	Yes

For further information
visit our
Customer Portal



World of Protectosil®

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