

# Protectosil® DRY CIT

Highly efficient, in water redispersible powdery corrosion protection additive based on Multifunctional Silane Systems™ for cementitious building materials.

## Technical Data

Properties and test methods	Value	Unit	Method
Appearance	Free flowing white powder		
Powder density	340-540	g/l	DIN EN ISO 60
Residual moisture	< 2	%	
Water soluble chloride	< 0,1	%	according to EN 480-10
pH (10% in water)	6-9		
Dry weight	>98	%	

## Registration

### Protectosil® DRY CIT

EINECS/ELINCS (EU):	Yes
AICS (Australia):	No
DSL/NDSL (Canada):	*
PICCS (Philippines):	Yes
TSCA (USA):	Yes
IECS (P.R. China):	*
ENCS (Japan):	Yes
ECL (South Korea):	Yes
* = available on request	

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## Safety and Handling

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 [www.protectosil.com](http://www.protectosil.com) or upon request from your local representative, customer service or from Evonik Operations GmbH, Product Safety Department, E-MAIL [sds-hu@evonik.com](mailto:sds-hu@evonik.com).

## Packaging and Storage

Protectosil® DRY CIT is supplied in standard package: 15 kg paper bag with polyethylene inliner or palette with 45 paper bags at 15 kg each (675 kgs). Other packages such as Big Bags or silo transport vehicles are available upon request. Storage under dry conditions at temperatures below 30 °C is strongly recommended. The shelf life is at least 12 months. Bags which are stored under pressure, are damaged or left open over longer periods of time tend to contain agglutinated material.

## Properties and Use

### Protectosil® DRY CIT

- Is part of cement based dry mortar formulations
- Forms "in-situ" a protection layer on steel reinforcement during setting phase of mortar without any further treatment
- Protect embedded steel reinforcement against corrosion pitting caused by surrounded chloride contents above critical threshold
- Reduces significantly the uptake of water
- Modified mortar mix designs show excellent wetting properties during processing

### Protectosil® DRY CIT is especially suited for

- All kind of repair mortars especially designed to be used at high chloride containing environment
- Modification of cement
- Maintenance work especially such as parking decks, facades, balconies, walkways, piers, bridge decks, beams and columns based on concrete
- Marine environment with high relative humidity and areas where de-icer salts are used

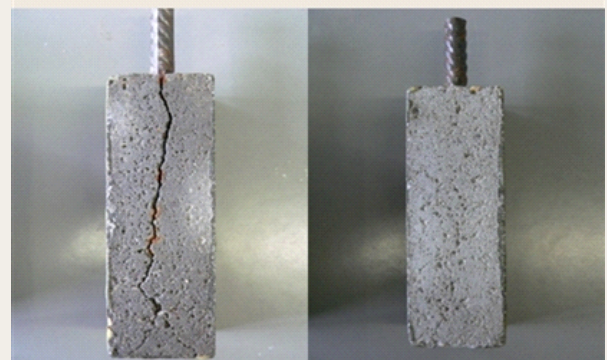
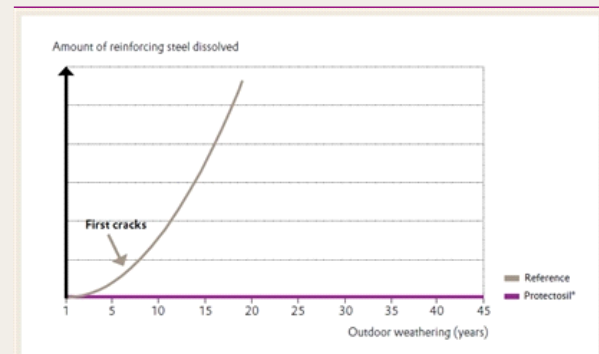
## Processing

Protectosil® DRY CIT can be handled in all standard compulsory mixers for powdery cement based products. Potential interactions with further additives have to be tested. The recommended dosage of Protectosil® DRY CIT for concrete repair mortar is 0,3 - 1,0 % and for cement based anti corrosion slurry 2,0 - 3,0 % by mass on total dry formulation.

Protectosil® DRY CIT containing formulations are smoothly miscible with water. It is recommended to stir the Protectosil® DRY CIT containing end formulation into the mixing water using the appropriate vessel and mixer. A ripening time of 1 - 5 minutes, depending on the used additives, has to be considered prior to the application.

Proof of corrosion protection functionality was given by external and independent test series at Swiss Society of Corrosion Protection (SGK).

In-House laboratory corrosion activity monitoring test of embedded rebars in mortar specimen showed effectiveness in long term prospective of several decades. Non modified reference specimen suffer from immediate corrosion right from begin of testing, followed by crack after few test cycles with increasing width. Mortars containing Protectosil® DRY CIT do not show any corrosion activity or cracks also after whole test period, which counts for more than 50 years in the field.



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