



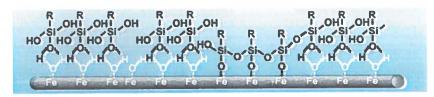
Technical Datasheet Specialty Additive

ELOTEX® COPRA900

Description

ELOTEX® COPRA900 is an additive in powder form for mass modification of cement based materials to protect steel rebar against corrosion caused by chloride penetration.

ELOTEX® COPRA900 is a special designed siloxane encapsulated in polyvinyl alcohol. During mixing cement based material with water the active ingredient is immediately released and therefore homogeneously distributed in the whole layer. The released siloxane of **ELOTEX® COPRA900** forms in situ a protection layer around the steel rebar during setting process of cement based material without any further treatment or application step.



ELOTEX® COPRA900 forms a water insoluble structure inside the concrete or mortar layer which does not leach out even after long term exposures. Durability and sustainability of the construction is significantly prolonged.

Technical Specifications

Composition	Encapsulated Siloxane in PVOH
Appearance	Free-flowing, white powder
Bulk Density	250 – 450 g/l
Watersoluble chloride content in accordance to EN480-10	< 0.1 %
Residual Moisture	< 2.0 %
pH-Value	6.0 – 9.0 (10 % dispersion in water)

Guidelines for use

Powder Processing

Due to its convenient powder form **ELOTEX® COPRA900** can be easily mixed with other dry components of the mix design of concrete or mortar. It is key to blend **ELOTEX® COPRA900** in dry form to ensure homogeneous distribution of released siloxane during mixing with water of cement based material.

Dosage and Mixing

Recommended dosages of ELOTEX® COPRA900 are

2.0 – 4.0 w%. on cement amount for concrete mix designs

respectively 0.5 - 1.0 w%. on total dry components for dry mortar formulations.

Benefits

- Mass protection of cement based materials against corrosion caused by chlorides
- Protection layer around rebar formed in situ during application and setting
- No leaching
- No need for extensive remediation
- Provide long term durability and protection
- Non-toxic
- No after treatment necessary
- Free-flow powder for convenient handling and dosage

Recommended Applications

- Steel reinforced concrete exposed at high chloride containing environment (e.g. tidal zones, tunnels and parking garages)
- Shotcrete application
- Concrete repair systems
- Prefabricated concrete elements
- Suitable for heat accelerated drying processes of cement based materials

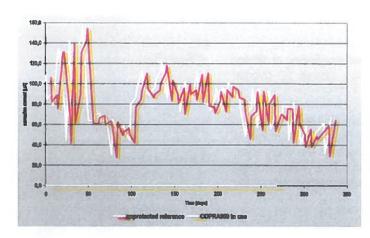


Compatibility

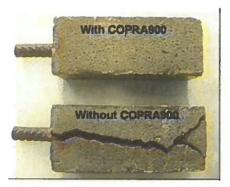
ELOTEX® COPRA900 is in principle compatible with all kind of raw materials which are used typically in cement based mix designs.

Test Results

Corrosion test of so called "lollypop specimen" with fixed steel rebar showed significant proof of corrosion protection. Specimen were subjected to cycles of NaCl solution followed by drying cycles in order to enrich chloride content in the specimen over time. Sample containing **ELOTEX® COPRA900** exhibits outstanding corrosion protection.







Quality, Safety and Environment

ELOTEX® COPRA900 is non-toxic and unclassified according to Regulation 88/379/EEC. We recommend all individuals using ELOTEX® COPRA900, or coming in contact with it, to observe the separate Safety Data Sheets. Our safety specialists will be pleased to advise you regarding safety, health and environmental issues of our products. Elotex has been certified according to DIN EN ISO9001 and DIN EN ISO 14001.

Packaging, Storage and Handling

Standard packaging for ELOTEX® COPRA900 is a 15 kg paper sack with polyethylene liners. Store in original packaging.

As a basic rule it is recommended to store Elotex powders in a dry location at temperatures below 30°C and to process within twelve months after receipt of the delivery. Sacks that are stored under pressure, at increased temperature, damaged or left open for an extended period, increase the risk of caking of the powder.

Product Liability

The above information and recommendations are based upon our experience and are offered merely for advice. They do not absolve the consumer from making his own tests. Elotex AG, their representatives or distributor organizations have no control over the conditions under which Elotex powders are transported, stored, handled or used. Responsibility for damage arising from the use of our products cannot be derived from the recommendations given. The observance of any intellectual property rights of third parties is the responsibility of the consumer in each case.

Technical information may not be passed on to any third party without our previous consent.

Other Information

Version

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