



Faceal Hydro CP

(EVONIK® Technology)



Curative and preventative treatment of existing concrete structures against water penetration, concrete bar corrosion and carbonation. Conform to EN 1504 norm.

Product description

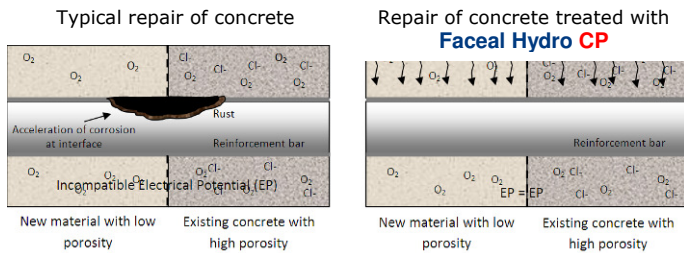
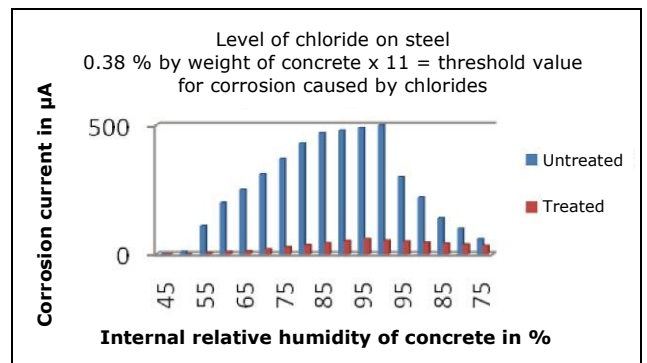
Faceal Hydro CP is a ready-to-use product specially designed to reduce concrete reinforcement corrosion.

Curative: it remedies and stops existing corrosion on concrete structures (max corrosion rate of 5 microns/cm²)

Preventative: Metal reinforcement in contact with humidity and chlorides (de-icing salts, etc.) oxidise, resulting in expansion which cracks the concrete and weakens the mechanical strength of the material components.

Unlike other corrosion inhibitors, **Faceal Hydro CP** penetrates very deeply into concrete (up to 6 centimetres) and thus blocks humidity and chlorides. It is also effective with micro-cracks (up to 0.3 mm)

Faceal Hydro CP is ideal to protect civil engineering structures (bridges, pillars, car parks...), architectonic concrete, etc.). It provides strength and durability which reduces repairs to structures.



The anode effect occurs around it

Faceal Hydro CP interrupts the electrolyte effect and the corrosion cycle between the different concretes

Reduction of chloride attack

Tests complying with ASTM standard 1152 at depths of 12.5 mm, 32 mm, 50 mm and 69 mm.

Depth in mm	12 weeks	24 weeks	48 weeks	12 weeks	24 weeks	48 weeks
12.5	0.7033	0.861	1.02	<0.007	0.01	<0.007
32	0.321	0.628	0.645	<0.007	<0.007	<0.007
50	0.032	0.386	0.0386	<0.007	<0.007	<0.007
69	<0.007	0.04	0.04	<0.007	<0.007	<0.007

Chemical properties

- Faceal Hydro CP** contains no organofunctional solvent.

Faceal Hydro CP's exceptional water-repellent properties makes it effective in preventing water penetration and therefore eradicates the harmful effects caused by humidity (infiltrations, acid rain, erosion, freeze/thaw cycles, moss and lichen growing, efflorescence, etc.).

Advantages and characteristics

- Increases the service life of concrete.
- Can be applied to vertical and horizontal structures.
- High penetration.
- **Fully efficient within 2 weeks.**
- Excellent durability (> 15 years).
- Does not alter the aesthetic appearance of the structure.
- Suitable for in-situ concrete and prefabricated concrete.
- Easy application by spray.
- Effective on structures subject to corrosion
- Effective under high humidity conditions.
- Non film-forming, allows the support to breathe.
- Silicone-free.
- Excellent ageing, UV-resistant, does not yellow.
- Invisible after drying.
- Ready to use.

Official tests

Faceal Hydro CP has passed numerous tests demonstrating its performances and its effectiveness.

- Kiwa Polymer Institute (Germany): conformity to EN 1504-2 Norm
- CBI BetongInstitutet AB (Sweden): Test on penetration depth inside concrete, breathability, resistance to chlorides according to Swedish National Road Authorities

Packaging

5 and 25 litre containers.
1 000 litre containers.

Technical data

Physical state at 20 °C	: Liquid.
Colour after drying	: Colourless.
Odour	: Solvent
pH	: 11
Boiling point [°C]	: 100 °C
Density	: 0.882±0.3
Solubility in water [vol/vol]	: Insoluble
Flashpoint [°C]	: > 62°C
VOC	: < 80g/l

Instructions for use

- Shake the container well before use.
- The surface must be dry, clean and free of any trace of oil, grease, cleaning product, dust, efflorescence, paint or any other substance liable to prevent the correct penetration of **Faceal Hydro CP**.
- Non-active cracks which do not threaten the durability of the structure from a mechanical point of view may be treated normally with **Faceal Hydro CP**.
- Other cracks or defective seals must be repaired, treated with **Faceal Hydro CP** and filled using a sealant.
- Apply **Faceal Hydro CP** on the whole surface to be protected, including the repaired areas.

- **Faceal Hydro CP** must be applied with a low-pressure sprayer with a Viton seal. Apply 1 to 3 coats until saturation which will vary due to degree of the exposure to weather and abrasion. In exceptional cases (tide, marine environment...), **Faceal Hydro CP** must be applied in 3 to 6 coats.
- Wait for at least 15 minutes between each application: the surface must be visually dry. Use the product in the pure state: do not dilute.
- When spraying, be careful that no mist occurs.
- Drying time: 24 to 72 hours.
- Before overcoating with a protective or other coating, wait at least for 15 days.

Consumption

Consumption depends on the porosity of the material and its geographic location. The values below are given only as an indication:

180 to 230 g/m² per coat.

Cleaning equipment

- Clean tools and equipment immediately after.

Storage

- Keep in a dry place (between 5°C and 30°C).
- Storage: 24 months following the production date when kept in the original unopened container.

Recommendations

- Only treat surfaces which have been cleaned of any atmospheric pollution.
- Only apply at temperatures between 5°C and 30 °C.
- Do not apply in bright sunlight, rainy weather or when there is a risk of rain.
- Do not dilute or mix with another product, especially water.
- Protect materials not intended to be treated, such as glass, aluminium, wood and paint.

Health and safety

- Respiratory protection: No respiratory protection equipment is required under normal conditions of use with adequate ventilation.
- Hand protection: Wear rubber gloves.
- Skin protection: Wear protective clothing.
- Eye protection: Wear protective goggles.
- In the event of ingestion: Do not induce vomiting. Contact a doctor or a specialist.

Keep out of reach of children !

Technical assistance

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Date of last update: 15/09/2010