# **ICC** Premiscelati



# **PASSIVANTE ICC**

# ONE-COMPONENT ANTI-CORROSION CEMENTITIOUS MORTAR FOR STEEL REINFORCEMENT RODS



## **Description:**

**PASSIVANTE ICC** is a special product with anti-corrosion effect for the protection of concrete reinforcing rods. Its use is recommended for rust treatment of reinforcing rods in deteriorated concrete and in normal casting repair operations.

**PASSIVANTE ICC** is a one-component cement-based powder product, modified with synthetic resins and additives to counteract the effects of pH decreases of the concrete.

When mixed with water, *PASSIVANTE ICC* becomes a very flowable mortar that can be easily applied by brush.

### Areas of application:

**PASSIVANTE ICC** is used as corrosion-inhibiting protection of reinforcement rods and as adhesion improver for concrete repair mortars.

# **Preparation:**

Before applying the product, ensure that the concrete enclosing the reinforcement rods has been thoroughly cleaned, free from any friable parts, and then washed with clean water; thoroughly clean the reinforcement rods by brushing or sandblasting to remove any rust residue.

### Mortar preparation:

**PASSIVANTE ICC** is prepared by mixing the powder with  $21 \div 23\%$  of clean water; mix with a low-speed drill and whisk until obtaining a homogeneous and lump-free slurry. The obtained mortar must be applied within 1 hour \*.

#### Application:

Apply **PASSIVANTE ICC** to the reinforcement rods using a brush in a first layer of approximately 1 mm. After about 2 hours (depending on the weather conditions\*), apply a second coat. To improve the adhesion of the repair mortars, it is possible to apply **PASSIVANTE ICC** to the entire surface of the concrete to be restored.

# **Consumption:**

- For 8 mm diameter rods: approx. 100 g/m of product applied in 2 mm thickness.
- For 16 mm diameter rods: approx. 200 g/m of product applied in 2 mm thickness.

#### **TECHNICAL DATA**

Appearance Light blue powder

Maximum grain size 0.5 mm

Bulk density (powder) 1.3 gr/cm<sup>3</sup> approx.

Solid residue 100%

Mixing water  $21 \div 23 \% (1 \div 1,1 \text{ lit per 5 kg package})$ 

Bulk density of the mixture approx. 1800 kg/m<sup>3</sup>
Mixture pH 12.5 approximately

Working time approx. 1 h\*

Applicable thickness per coat 1 mm
Minimum total thickness 2 mm

Application of the second coat after  $2 \div 4 h^*$  from the first coat

Application of the repair mortars after  $6 \div 24 \text{ h}^*$ Allowed application temperatures from  $+5^{\circ}\text{C}$  to  $+35^{\circ}\text{C}$ Adhesion to concrete approx. 2 N/mm<sup>2</sup>

Adhesion to sandblasted steel excellent

\*Data measured at (20±2)°C and (65±5)% relative humidity. Lower temperatures lengthen curing and hardening times.

## Cleaning of equipment:

Wash hands and tools with plenty of clean water before the product starts setting; mechanical means should be used afterwards.

# Hygiene and safety:

Do not inhale dust, ventilate areas during mixing and carefully protect yourself with gloves, protective clothing and goggles. Before use, carefully read the instructions on the packaging and consult the Safety Data Sheet.

#### Packaging:

**PASSIVANTE ICC** is available in 2 kg or 5 kg packages.

# Storage:

Store the product in its undamaged original packaging in a cool, dry place. Do not disperse dust. Cr VI content less than 2 ppm. Properly stored product must be used within 6 months of the packaging date stamped on the bag.

#### Warning:

- Do not apply on frozen substrates or in any case at ambient temperatures below +5°C. - It is recommended not to add unrelated products. - When the product starts to lose workability, it must be removed; do not add water to the product during the setting phase. The cleaning of the reinforcement rods must be thorough and the removal of rust must be complete. - After cleaning, immediately apply *PASSIVANTE ICC:* do not leave the cleaned rods without any protection for long periods. - Only the latest updated version of this technical data sheet, available on the website *www.calcecasertana.it*, is to be considered valid.

#### PRODUCT FOR PROFESSIONAL USE ONLY

All the data and information contained in this technical data sheet, although resulting from laboratory tests performed and from our direct application experiences, due to the infinity of variables related to site conditions, are to be considered in any case as purely indicative. Before applying the product, the user is therefore required to establish whether it is suitable for the intended use, in the specific hygrothermal and application conditions provided for at the time of use. All responsibilities are therefore borne by the user. We are not liable for damage to persons or things deriving from improper use of the product.