

# **Repar Monosteel**

# Passivating monocomponent cement, anticorrosive, for reinforcing rods



Cement slurry in monocomponent powder, passivating, light blue in colour, to be added with water, modified with superpozzolanic agents, flexibilising resins and corrosion inhibitors, for the passivating treatment of oxidised reinforcing rods, in the restoration of degraded concrete.

CUSTOMS CODE: 3824 5090 COMPONENTS: Single-component APPEARANCE: Powder AVAILABLE COLORS: Light blu PACKAGING AND DIMENSIONS: Pail 2.5 kg - Pail 5 kg - Bag 25 kg

#### **OBTAINED CERTIFICATIONS AND REGULATIONS**



#### FEATURES AND BENEFITS

The anti-corrosive effectiveness of Repar Monosteel results from the high alkalinity and from the superpozzolanic reactivity of components. The specific corrosion inhibitor contained in the compound (DCI - Corrosion Inhibitor Agrement Certificate BBA\*\* n.96/3232), conforming to the standard UNI 9747, is based on a reaction which is capable of making unavailable the ferrous ions for the supply of the electrochemical processes of corrosion. The polymeric components of Repar Monosteel also determine further increases in the effectiveness against corrosion, especially vis-à-vis the aggressive attacks arising from chlorides and sulphates. (BBA = British Board of Agrement).

#### FIELDS OF APPLICATION

Passivating protection treatments of the reinforcement rods in interventions of restoration of works and articles in reinforced concrete, in marine, mountain and industrial environments.

#### ALLOWED SUPPORTS

Concrete - Rusty reinforcement rods



# **PREPARATION OF SUPPORTS**

Carefully remove loose rust from the metal surfaces of exposed reinforcing bars by sandblasting or deep brushing until the white metal surface is obtained. This operation is essential to effectively develop the anticorrosive property of Repar Monosteel. Obviously, to block the advance of the carbonation profile in the concrete, it is essential to complete the restoration with the appropriate restoration mortars: thixotropic (Repar line) or pourable (Grout line).

#### MODE OF USE

Place about half a litre of water in a bucket, gradually add Repar Monosteel and the additional water needed to achieve a fluid, dense, brushable consistency (about 8 - 10 litres of water for a 25 kg bag). Continue mixing until a smooth, lump-free mixture is obtained. Apply with a brush to the surfaces of the previously prepared reinforcing bars. To prevent the application of the repair mortar from removing the still fresh Repar Monosteel treatment, wait for the product to harden before proceeding with the volumetric restoration. The minimum recommended waiting time is about 6-8 hours with summer temperatures and about 12-16 hours with winter temperatures. Do not apply the product with temperatures below 5°C or if it is expected that the temperature may fall below this value during the first 12 hours of curing.

#### **APPLICATION METHODS**

Brush

# **TOOL CLEANING**

Water

# **KEY FEATURES**

Highlighted product

Nonflammable

Temperature of use: +5 / +35 °C

# Mix with water: 32-40 %

Shelf-life: 12 months

Use wearing protective gloves

# **TECHNICAL SPECIFICATIONS**

UNI EN 1015/11 Compressive strength after 1 day **10 MPa** UNI EN 1015/11 Flexural strength at 1 day **3 MPa** 

EN 15183 Corrosion resistance < 0.5 mm

UNI EN 1542 Concrete adhesion (direct traction) \* 2.4 N/mm<sup>2</sup>

Water/binder ratio < 0.45

pH > **12** 

UNI EN 1015-6 Density **1700 kg/m**<sup>3</sup> UNI EN 1015/11 Compressive strength after 28 days **35 MPa** UNI EN 1015/11 Flexural strength after 28 days **8 MPa** EN 15184 Resistance to the extraction of the steel bars with improved adhesion > **90 %** 

Fire resistance A1

UNI PdR 88:2020 Total recycled content  $\geq$  **1.8** %

Darcy impermeability 1 x 10 E-10 cm/s



# CONSUMPTION

From 0.02 to 0.07 kg of Repar Monosteel for each linear metre of steel bar to be treated.

#### STORAGE AND CONSERVATION

Store the product in its original packing, in a fresh and dry environment, avoiding frost and direct sunlight. Inadequate storage of the product may result in a loss of rheological performance. Protect from humidity.

#### **PHOTO GALLERY**



# ADDITIONAL CONTENT





# WARNINGS AND PRECAUTIONS

The overflow of the product on the concrete adjacent to the treated rids does not entail any problem. The general information, along with any instructions and recommendations for use of this product, including in this data sheet and eventually provided verbally or in writing, correspond to the present state of our scientific and practical knowledge. Any technical and performance data reported is the result of laboratory tests conducted in a controlled environment and thus may be subject to modification in relation to the actual conditions of implementation.

Azichem Srl does not assume any liability arising from inadequate characteristics related to improper use of the product or connected to defects arising from factors or elements unrelated to the quality of the product, including improper storage. Those wishing to utilise the product are required to determine prior to use whether or not the same is suitable for the intended use, assuming all consequent responsibility.

The technical and characteristic details contained in this data sheet shall be updated periodically. For consultation in real time, please visit the website: www.azichem.com. The date of revision is indicated in the space to the side. The current edition cancels out and replaces any previous version.

Please note that the user is required to read the latest Safety Data Sheet for this product, containing chemical-physical and toxicological data, risk phrases and other information regarding the safe transport, use and disposal of the product and its packaging. For consultation, please visit: www.azichem.com.

It is forbidden to dispose of the product and/or packaging in the environment.

