

## Fluid CR

### Powder additive for cement conglomerates



Fluid CR is a powder additive for concrete, grout and pourable mortar, formulated with microsilys with pozzolanic activity, hyperplasticising additives, expansive additives and special anti-segregation polymers. Mixed together with water and the anhydrous components of cement conglomerates (aggregates and binders), it significantly increases their performance, improving the characteristics both in the fresh and hardened state.

**CUSTOMS CODE:** 3816 000

**COMPONENTS:** Single-component

**APPEARANCE:** Powder

**AVAILABLE COLORS:** Gray

**PACKAGING AND DIMENSIONS:** Bag 25 kg - Big bag 1000 kg - Pallet: 50 x (Bag 25 kg)

### FEATURES AND BENEFITS

The addition of the Fluid CR additive allows the improvement of various characteristics of the conglomerates, both in the fresh state and in the hardened state.

**In the fresh state:**

- drastically reduces the water/cement ratio;
- makes the mixture anti-washout therefore advisable, often indispensable, in castings in the presence of water (both fresh water and sea water) inside the formwork;
- avoids segregation and bleeding phenomena (separation of the mixing water);
- improves the workability of the casting, both in plastic and fluid consistencies, reaching self-compacting workability;

**In the hardened state:**

- increases mechanical performance in compression, bending, traction, abrasion;
- it drastically reduces porosity, increasing the compactness of the casting and waterproofing, resulting in the creation, with appropriate mix designs, of intrinsically waterproof concrete;
- increases the chemical-physical resistance and consequently the durability of the conglomerate;
- the slightly expansive characteristics, induced in the conglomerates by the special additives contained in the formulation, allow the drastic reduction of shrinkage phenomena and pre-compression of the reinforcing bars.

Fluid CR is perfectly compatible and synergistic with all our metallic and/or synthetic fibers from the READYMESH line. The introduction of Fluid CR in fibre-reinforced conglomerates increases the meshing between fiber and matrix, enhancing the mechanical performances induced by the fibrous components. Fluid CR is perfectly compatible and can be used with all types of Portland, Pozzolanic, Blast Furnace or Composite cement available on the market.

- Expansion prevented with dosages > 30 kg/m<sup>3</sup> (UNI 8147): > 0.01%
- Increase in mechanical resistance: 10-30%

## FIELDS OF APPLICATION

### Production of concrete, grout and mortar:

- with reduced water/cement ratio;
- rheoplastic-rheodynamic;
- intrinsically waterproof;
- anti-leaching and free of segregation and bleeding.

### Application fields:

- industrial flooring;
- structures in contact with groundwater or sea water;
- underwater jets;
- structural reinforcements by casing nodes, beams and pillars in reinforced concrete;
- reinforcement of walls;
- sub-foundations and platings with slightly expansive characteristics.

## ALLOWED SUPPORTS

Concrete - Calcestruzzo armato

## MODE OF USE

Fluid CR must be added to the anhydrous components of the conglomerate (binders and aggregates), together with the mixing water. In concrete mixing plants, it is recommended to introduce the additive after or together with the insertion of the aggregates and before the introduction of the cement. After adding the product, ensure adequate mixing in order to obtain a homogeneous mixture free of lumps. Adjust the mixing water according to the effect of reducing the w/c ratio induced by the formulation. As regards setting times, Fluid CR is considered a neutral additive, i.e. it does not involve changes in the normal setting and hardening times of the cement conglomerate in which it is inserted.


## APPLICATION METHODS


To be added to other components

## TOOL CLEANING


Water

## KEY FEATURES

 Density: 1100 kg/m<sup>3</sup>

 Nonflammable

 Maximum diameter of aggregate: 0.3 mm

 Shelf-life: 12 months

## TECHNICAL SPECIFICATIONS

con dosaggi > 30 kg/m<sup>3</sup> a 3 h EN 445  
Exudation < 1.5 %

10 - 30 %



## CONSUMPTION

From 15 to 80 kg/m<sup>3</sup> depending on the intended uses. Recommended dosages:

- castings for industrial flooring: from 15 to 30 kg/m<sup>3</sup>
- castings for structural reinforcements: from 15 to 50 kg/m<sup>3</sup>
- castings with anti-washout characteristics: from 40 to 80 kg/m<sup>3</sup>

## 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. Store the product at a temperature between +5°C and +35°C.

## PHOTO GALLERY



## WARNINGS AND PRECAUTIONS

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](http://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](http://www.azichem.com).

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

