



Rev 2  
02/22



# UNICUM POWDER

New-generation superplasticizer additive, highly effective water reducer for high quality premixed mortars



## DESCRIPTION

Since it is composed of top-quality polycarboxylic polymers, UNICUM POWDER, thanks to its dispersant action, its features and the good synergy among its components, confers to the concrete a huge reduction in the w/c ratio, making it possible to craft superfluid concretes, with high strengths at short and long curing periods.

This product is particularly suited for precast and winter climates.

## FEATURES

Since it is chloride-free, UNICUM POWDER is widely used in all structures with heavy reinforcements, whenever it is necessary to have superfluid, homogenous concretes, with a very low w/c ratio, with very high initial (since it accelerates cement hydration) and final strengths, together with excellent permeability and resistance to chemical damage.

This allows you to craft superfluid rheoplastic concretes and rheodynamic SCC (Self Compacting Concrete), with excellent maintenance of the workability, facilitating the crafting and placing of concretes in not easily reachable places. It facilitates the pumping process and always improves the adherence to reinforcing bars.

Noticeable decrease of the hygrometric shrinkage, excellent aesthetic finishing and increase in durability.

## ADVANTAGES

Its highly accelerant effect and the development of high strengths at short curing periods, reduce or allow to eliminate the time needed for the steam treatment

The usage of UNICUM POWDER allows you to obtain:

- Significantly more workable concretes at equal w/c ratio;
- Same workability with a reduction in w/c ratio;
- Facilitated placing and immediate response to the vibration process;
- Reduction in bleeding and better surface finishings;
- Reduction in setting times, depending on the temperature of the environment and of the concrete;
- Coaction of the superplasticizer potential of the additive and the faster hydration of cement;
- Reduction in the formwork removal time.

## FIELD OF USE

It is used in all types of high-resistance self-levelling concrete, for structural precast and prestressed, whenever a significant reduction in the w/c ratio and extreme fluidity are requested.

## VALIDITY

Shelf-life of 24 months from the date of purchase, in its original, perfectly sealed package, sheltered from direct sunlight, between 5 and 30°C.



TEKNA CHEM S.p.A.

Headquarters Renate (MB) - Via Sirtori, z.i. 20838 - Tel. +39 0362.91.83.11

Web: [www.teknachemgroup.com](http://www.teknachemgroup.com) - E-mail: [info@teknachemgroup.com](mailto:info@teknachemgroup.com) - Fax: +39 0362.91.93.96

# UNICUM POWDER



## PHYSICAL FEATURES

|                   |                               |
|-------------------|-------------------------------|
| State             | powder                        |
| Colour            | light amber                   |
| Density           | 0.58 ± 0.02 g/cm <sup>3</sup> |
| Ph (at 20 °C)     | 4.5 ± 1                       |
| Chlorides         | absent                        |
| Usage limitations | none                          |

## DIRECTIONS FOR USE AND DOSAGE

UNICUM POWDER is most effective when it comes to water reduction and concrete homogenization, if admixed after that all other components of the mixture have been added and well stirred and at least 80% of the mixture water have been poured.

Dosage by weight of cement: 0.15 – 0.35%.

Suggested dosage: 0.25% by weight of cement.

For higher dosages, to be used for particular works, contact our technicians.

## PACKAGING

800-1000 kg big-bags

25 kg bags

*Special automatic dispensers can be provided on request.*

## LEGAL NOTICE

The information contained in this technical data sheet, even though it represents the most advanced stage of knowledge, does not exempt the user from running accurate preliminary tests, under their own conditions of use and operation. We therefore decline any responsibility for the improper use of the product.

CE

1305  
TEKNA CHEM SPA  
Via Sirtori z.i. 20838 Renate (MB)

15  
1305 – CPD – 1146  
EN 934-2

### UNICUM POWDER

Concrete additive, water reducer with  
high efficiency / superplasticizer agent T  
3.1 / 3.2

T7  
Maximum chloride content 0.1%  
Maximum alkali content 0.5%

No hazardous substances



TEKNA CHEM S.p.A.

Headquarters: Renate (MB) - Via Sirtori, z.i. 20838 - Tel. +39 0362.91.83.11

Web: [www.teknachemgroup.com](http://www.teknachemgroup.com) - E-mail: [info@teknachemgroup.com](mailto:info@teknachemgroup.com) - Fax: +39 0362.91.93.96

