



Buzzi Unicem Next identifies a family of hydraulic binders based on calcium sulpho aluminate clinker obtained by the burning of a mix of bauxite, gypsum and limestone at a temperature of approximately 1,350°C subsequently ground.

Next SN05 is a binder obtained by combining Next clinker, anhydrite, and set-regulating admixtures.

Next SN05 can be combined with Portland cement (as 40% of the total weight) to obtain products that are low shrinkage and develop strength rapidly in only a short curing time.

When combined with Portland cement, **Next SN05** offers a wide range of performances due to its compatibility with all types of set-regulating admixtures, fluidifiers, viscosity modifying admixtures, expanding agents, retarders, aerating agents, etc.

Next binder SL05 confers exceptional durability, low permeability to aggressive substances and high resistance to sulfates.

Buzzi Unicem

Next SN05 Hydraulic binder made with calcium sulpho aluminate clinker

Proprietà

Physical characteristics

CaO	39 – 45%
Al ₂ O ₃	18 – 24%
SiO ₂	4 – 9%
SO ₃	18 – 24%
Cl ⁻	< 0.1%
Cr VI	< 2.0 ppm

Mineralogical analysis

C ₄ A ₃ S̄	> 35%
C ₂ S̄	< 30%

Density

2,800 kg/m³

Blaine spec. surface

[standard UNI-EN 196-6]

5,200 ± 500 cm²/g

Colour

light grey

Start of setting time

[standard UNI-EN 196/3]

> 10 min

Applications

Next SN05 is a binder that combined with Portland cement (in the recommended amount of 40% of the total weight of the binder) can be used in a large number of applications typical of the pre-mix dry mortar and precast industry.

- Latest-generation self-levelling screeds.
- Quick-drying self-levelling screeds.
- Self-levelling screeds with low risk Alkali-Silica Reaction (ASR).
- Self-levelling screeds subject to sulphate attack or to freezing and thawing cycles.
- Small precast elements that must be quickly removed from the formworks.
- Small precast elements of any colour.
- Small precast elements with high resistance to sulphates and freezing and to freezing and thawing cycles.



Warnings

- **Next SN05** does not contain expanding admixture or Shrinkage Reducing agents (SRA).
- When developing different formulations of ternary binders, we recommend keeping the **Next SN05**-Portland cement combination at 40% (in weight) of the total binder, varying the class, type and colour of cement. We recommend using the **Next base** formulation if different percentages are required.
- The characteristics of the ternary binder depend on the type and class of Portland cement mixed with the **Next NS05**, so preliminary tests should be conducted to verify the performances. In the absence of experimental data, the final performance levels can be estimated by using as a reference **Next binder** SL05, a ternary binder obtained by combining **Next SN05** and CEM II/A-LL 42.5 R cement from the Trino Vercellese (VC) plant.
- The performances of formulations made with **Next SN05** and Portland cement can be customized by varying the amounts of the admixtures typically used in concrete (fluidifiers, accelerators, retarders, viscosity modifying admixtures, aerating agents, etc.).
- **Next SN05** is also available in the **Next binder** SL05 formulation containing Portland cement. This solution offers the use of a single, ready-to-use binder that has been optimized by Buzzi Unicem.
- **Next SN05** can be supplied in bulk, in 25-kg bags or in big-bags.
- For additional information, it is recommended to read the user manual of **Buzzi Unicem Next**.
- Consult the safety data sheet, which can be downloaded from the website www.buzziunicem.it.

Range of products made with CSA

Next base

Binder made with calcium sulpho aluminate and anhydrite, for the formulation of products characterized by low shrinkage and quick development of mechanical strength.

Next binder

Ternary binder (made from the combination of CSA clinker, anhydrite and Portland cement), ready-to-use for precast and for the production of pre-mix dry products, such as self-levelling screeds, quick-setting mortar and concrete with limited shrinkage.



Environmental sustainability

Due to the low content of calcium carbonate in the raw materials, the production cycle of the Next products features reduced emissions of CO₂ in the environment.

Note: *The instructions provided in this document are the result of our best experience and are merely indicative. No responsibility is taken for defects or damages caused by misuse of the product or when the conditions of its use differ from our instructions. The Technical Assistance Department is always available for any advice and suggestions concerning proper use of the product and for the performance of technical tests.*

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