METAKAOLIN OR

1. PRODUCT DESCRIPTION

METAKAOLIN OR is a highly reactive metakaolin obtained by an industrial flash calcination process of a sandy kaolin clay.

METAKAOLIN OR also brings a clear improvement to fresh concrete. It increases the richness of the paste and provides much better cohesion to the mix.

The phenomena of granular separation are strongly slowed down and the robustness of the mix is improved.

METAKAOLIN OR makes it possible to maintain or even slightly improve the performance of a reference concrete by replacing part of the standard cement.

As such, it significantly reduces the carbon impact of the concrete.

METAKAOLIN OR significantly increases the durability of concrete (chloride diffusion, resistance to chemically aggressive environments) thanks to the reduction in the size of the pore network.

2. PRODUCT USE

METAKAOLIN OR is used in all types of standard and precast concrete formulations. It can cover all common mechanical performance ranges.

METAKAOLIN OR can also be used to produce many special concretes, such as extruded concretes, sprayed concretes, heavy or light precast concretes, horizontal or vertical self-cast concretes, architectural concretes, flowing screeds, high durability concretes...

Usual dosage: In accordance with standard EN 206, **METAKAOLIN OR** can be used as a partial replacement for CEM I or CEM II/A cements in a proportion of:

- 15% of the cement mass (CEM I)
- 10% of the cement mass (CEM II/A)

3. PHYSICO-CHEMICALS PROPERTIES

Physical properties (typical)*	
Apperance/Colour.....	Rose powder
Loss on ignition.....	1,11 %
Specific surface area (BET).....	15 - 20 m^2/g
Strength activity index 28 days	104,97 %
Bulk density	750 – 850 kg/m^3
Specific gravity.....	2500 - 2600 kg/m^3

(*) Average values of the production given as an indication

Chemical Analysis	
% $SiO_2 + Al_2O_3$.....	91,27
% CaO free.....	0,40
% $Na_2O + K_2O$.....	0,16
% Cl^-.....	0,002
% SO_3.....	0,6

4. SUSTAINABLE DEVELOPMENT

METAKAOLIN OR is an addition that significantly contributes to reducing the carbon and energy footprint of concrete.
The carbon impact of the manufacture of **METAKAOLIN OR** is 139 kg CO_2/mt.

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