



Rev 0  
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# TEKNAPLAST AE N-S

Plasticizer for concrete specifically for extruded concrete



## DESCRIPTION

TEKNAPLAST AE N-S is a plasticizer-aerating, ready-to-use additive for lightened plastic mixes, (consistency S1 - S2) and cement mortars. Composed of appropriate modified polymers, it is also suitable in lightweight concrete to improve the interpenetration to the cement paste of: expanded clay, polystyrene, perlite, vermiculite, cork, etc.

Also specific for homogeneous mixtures of grits.

TEKNAPLAST AE N-S flows to the mixtures, depending on its dosage, smoothness, fluidity, avoiding phenomena of segregation or separation of components.

## FEATURES

TEKNAPLAST AE N-S acts by dispersing cement particles and fine parts of aggregates, reduces the amount of water required to wet their surface, and improves vibration response.

For some of its catalytically acting components, better hydration of cement particles is achieved, resulting in increased strengths at the same w/c ratio.

The presence of stabilized micro-bubbles of air improves the rheology of concretes with low cement dosage by facilitating their pumping; moreover, greater stability of mortars and concretes made with lightweight aggregates is obtained.

The actual amount of micro-bubbles of air incorporated will depend on the dosage of the admixture, the amount of water, the viscosity of the concrete and the mixing energy.

## ADVANTAGES

The use of TEKNAPLAST AE N-S in concrete makes it possible to achieve, compared with a concrete without additive:

- More workable concretes, with the same w/c ratio, thus great economies in paving;
- Reduction in w/c ratio, with the same workability;
- Improved response to vibration operations;
- Increased initial workability time due to a slight delay in setting (not at hardening);
- Reduction of bleeding and volumetric changes in castings in the fresh state;
- Increases in the strengths of concretes under the same conditions, including lean concrete;
- Perfect and easy surface finish;
- Reduced permeability and increased resistance to freeze-thaw cycles.

## FIELDS OF USE

- 0 slump concretes, wet earth consistency, extruded or vibro-compressed;
- Pumping adjuvant for concrete with low cement dosage;
- mixtures with lightweight aggregates (expanded clay, perlite, vermiculite, polystyrene, etc.);
- plaster and masonry mortars.



TEKNA CHEM S.p.A.

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## METHOD OF USE.

In the Truck Mixer: it is introduced together with the first mixing water, before the aggregates and cement.

With mixer: all the components and about 90 percent of the required water are added afterwards; at the end of mixing, the necessary water is added to obtain the desired consistency. As the product is a reducer of the w/c ratio, it is recommended to carefully control the amount of water used as an overdose of this can cause bleeding, segregation and, therefore, nullify the effect of TEKNA PLAST AE N-G.

Preliminary tests are always recommended.

## PHYSICAL PROPERTIES

State	liquid
Colour	brown
Density at 20 °C	1.03 ± 0,02 kg/dm <sup>3</sup>
pH	12.5 ± 1

## DOSAGE

0.5-0.7% on cement weight: lightened concretes, pumpable  
0.2-0.4% on cement weight: wet-earth consistency concretes

## STORAGE

The product will hold its properties for 12 months if stored in the original sealed packages and without having been altered. TEKNA PLAST AE N-G fears frost but retains its characteristics if mixed after thawing.

## PACKAGING

25 kg plastic jerry cans  
200 kg drums  
1050 kg tanks  
Bulk in tanker

## LEGAL NOTICES

The information contained in this technical data sheet, while representing the most advanced stage of knowledge, does not exempt the user from carrying out accurate preliminary tests under the usual conditions of use and exercise. We therefore decline all responsibility for improper use of the product..

