

# QUANTEC<sup>®</sup> NC-525P

Plasticizing, Non-Chloride Set Accelerator

# **Product Description**

QUANTEC®NC-525P is a non-chloride, non-corrosive plasticizing admixture specially formulated for use in the manufacture of machined concrete products where the process requires zero or very low slump concrete and accelerated early strengths.

QUANTEC<sup>®</sup>NC-525P is supplied as a chemically formulated ready-to-use liquid. Its low viscosity, approximating that of water, ensures rapid, accurate dispensing. QUANTEC<sup>®</sup>NC-525P does not contain calcium chloride or contribute to efflorescence. Companion products to QUANTEC<sup>®</sup>NC-525P are QUANTEC<sup>®</sup>PL-466 for a smoother, denser surface with a swipe, and QUANTEC<sup>®</sup>PL-477R for normal textured, low slump concrete block.

## Product Advantages

- Non-chloride/non-corrosive
- Accelerated strengths
- Reduction or elimination of steam curing
- Reduction in fuel costs
- Increased throughput
- Better compaction
- Increased plasticity
- Reduced cracking and crazing
- Sharper corners and edges
- Improved texture
- Fewer culls
- Cost effective

## Product Uses

QUANTEC®NC-525P may be used in all zero or low slump concrete to increase workability while retaining cohesiveness, and providing more rapid hydration of the cement. In addition, QUANTEC®NC-525P gives the acceleration necessary to provide high early strength while reducing or eliminating the requirement for steam curing. This benefit can also allow for replacement of Type I Cement for Type III Cement. QUANTEC®NC-525P is intended for use in normal weight and lightweight concrete block mixes and may be beneficially used in concrete pipe, concrete tile and concrete brick.

The mixes designed for these products are characteristically dry, containing minimal water. Additional water would be desirable to allow for complete hydration of the cement and improve mix cohesiveness. However, an increase in water content is impractical from a production standpoint. A very low or zero slump is necessary for dimensional stability of the units upon removal from the mold.



The use of QUANTEC®NC-525P will compensate for the water deficiency in such mixes. QUANTEC®NC-525P is both a plasticizing agent as well as an accelerating agent. By dispersing the cement and aggregate fines, it improves the workability of the mix. Dispersion of the cement results in more complete hydration. This coupled with the acceleration produced by QUANTEC®NC-525P provides greater early strength for any given cement content. Addition of QUANTEC®NC-525P can increase the early compressive strength of the block at the same cement content.

The increased workability provided by QUANTEC<sup>®</sup>NC-525P allows for better compaction of the block with less cracking and crazing, sharper corners and edges, resulting in fewer culls. Production can be increased, absorption reduced and appearance and texture greatly improved.

## **Application Information**

#### Addition Rates

QUANTEC<sup>®</sup>NC-525P is used at the rate of 390-780 mL/100 kg (6-12 fl oz/100 lbs) of cementitious materials in the mix.

#### **Dispensing Equipment**

A complete line of admixture dispensing equipment is available.

#### Packaging

QUANTEC<sup>®</sup>NC-525P is available in drums and returnable totes.

### Health & Safety

All precautions defined on the SDS (Safety Data Sheet) for QUANTEC®NC-525P must be followed.

#### Storage

QUANTEC®NC-525P will begin to freeze at approximately -4°C (25°F), but will return to full strength after thawing and thorough mechanical agitation.

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