

QUANTEC[®] PL-433

Plasticiser for low slump concrete products

Product Description

QUANTEC[®]PL-433 is a specially formulated admixture for use in the manufacture of machined concrete products where the process requires zero or very low slump concrete and where a smoother, denser, surface finish with a swipe is desirable. QUANTEC PL-433 is supplied as a chemically formulated, ready-to-use liquid. Its low viscosity, approximating that of water, ensures accurate and rapid dispensing.

Product Advantages

- Non-chloride/non-corrosive
- Accelerated strength
- Reduction or elimination of steam curing
- Reduction in fuel cost
- Sharper corners and edges
- Reduced crazing and cracking
- Reduced shrinkage
- Reduction of cement or replacement of Type I with Type III
- Cost effective

Addition Rates

QUANTEC PL-433 is used at the rate of 130 - 325mL / 100kg of cementitious material in the mix.

Packaging & Storage

QUANTEC PL-433 is available in 205L drums and 1,000L totes. QUANTEC PL-433 will begin to freeze at approximately 0°C, but will return to full strength after thawing and thorough agitation. Do not use pressurised air for agitation.

Applications

QUANTEC PL-433 may be used in all zero or low slump concrete to increase workability while retaining cohesiveness. QUANTEC PL-433 produces the rich smear required for a smooth, swipe finish. QUANTEC PL-433 is intended for use in lightweight and normal weight concrete block mixes and may be beneficial if used in concrete pipe, concrete pavers, concrete tile and concrete brick.

The mixes designed for these products are characteristically dry, containing only sufficient water for the hydration of the cement. Additional water would be desirable to improve workability and to compensate for any loss in water which would result in incomplete hydration and lower strengths. 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 form. The use of QUANTEC PL-433 will compensate for the water deficiency in such mixes. QUANTEC PL-433 is a dispersing agent designed to provide a swipe finish. By dispersing the cement and aggregate fines, it improves the workability of the mix. Dispersion of the cement results in more complete hydration, and consequently, greater strength for any given cement content. Addition of QUANTEC PL-433 can increase the compressive strength of the block at the same cement content.

The increased workability provided by QUANTEC PL-433 allows for better compaction of the concrete with less cracking and crazing and sharper corners and edges, resulting in fewer culls. Production can be increased, absorption reduced, and appearance and surface characteristics greatly improved.

Dispensing Equipment

Please contact your local GCP representative for further information regarding the dispensing equipment for this product.

Health & Safety

All precautions defined on the Material Safety Data Sheet for QUANTEC PL-433 must be followed

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GCP Applied Technologies Inc., 2325 Lakeview Parkway, Alpharetta, GA 30009, USA

GCP Australia Pty. Ltd., 14 Colebard Street West, Archerfield, Brisbane, Queensland 4108, Australia

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