

QUANTEC[®] PL-422

Product Description

QUANTEC[®] PL-422 is a low dosage, higher performance plasticiser acting in conjunction with a catalyst, to produce a synergistically effect low in slump mixes which improves both cement dispersion (optimising hydration potential) and strength gain characteristics. Particular benefits can be found in machine-made masonry products, brick, block and paver production.

QUANTEC[®] PL-422 is intended for use in block mix concretes, and low slump concrete systems involving vibro-compression and instant de-moulding.

QUANTEC[®] PL-422 is manufactured under carefully controlled conditions, to produce a highly consistent product.

Advantages

- Increased strengths (15% - 30%)
- Reduced curing period/steam curing costs
- Improved responsiveness to vibration
- Faster production cycle
- Improved surface finish and texture
- Sharper edge detail
- Reduced breakage rate
- Improved cement economies at same or better strength

Typical Properties

Appearance	Dark amber liquid
Specific Gravity (20°C)	1.13
Air Entrainment	None in semi-dry mixes
Freezing Point	0°C

Method of use

QUANTEC[®] PL-422 is supplied ready for use and should be added to the mix after the addition of the cementitious component, at the same time as the mixing water.

Overdosing in semi-dry mixes will yield a more plastic mixture, and problems may be experienced with edge slumping of cast masonry units and retardation of set and strength development.

The set retardation effect will depend on ambient temperatures, cement used and amount overdosed. However, if the units are properly cured, the ultimate strength will generally be higher than normal.

Typical Uses

- Concrete blocks - including natural/ light weight or artificial aggregates, in both static /mobile production systems - air cured, steam cured, autoclaved
- Concrete brick presses
- Paving block production
- Extruded concretes
- Concrete tile manufacture
- Most concrete/cementitious systems involving low workability mixes and vibration intensive/press production methods.

Addition Rates

Range	150 ml - 300 ml per 100 kg cement
For best results, it is recommended that QUANTEC® PL-422 performance first be assessed in preliminary tests using the actual mix constituents. This will help determine the optimum dosage.	
For advice and assistance with trials we recommend that you consult GCP Applied Technologies.	

Compatibility

With Cements:

QUANTEC® PL-422 can be used with all types of Portland cement, including cement replacement materials.

For use with special cements we recommend that you consult GCP Applied Technologies.

With Other Admixtures:

QUANTEC® PL-422 should not be pre-mixed with other admixtures prior to addition to the mix.

The performance of the admixture may be affected by the presence of other chemicals, and we recommend that GCP be consulted in such circumstances.

Dispensing

It is preferable that liquid admixtures for concrete should be introduced into the mixer by means of automatic dispensing equipment.

Packaging

QUANTEC® PL-422 is supplied in 205 litre non-returnable containers and in 1000 litre totes.

Alternatively, bulk deliveries can be arranged.

Storage

QUANTEC® PL-422 should be stored above 0 °C and protected from frost.

Storage Life in Manufacturer 's Drums:

12 months from date of manufacture.

Storage Life in Bulk Storage:

12 months from date of delivery.

Health and Safety

For further information on Health and Safety matters regarding this product we recommend that you consult the relevant Material Safety Data Sheet from GCP.

In line with general chemical handling precautions avoid contact with skin or eyes and protective gloves/goggles should be worn.

Technical Service

Our Technical Service department of GCP Applied Technologies is available to assist you in the correct use of our performance chemicals.

gcpat.uk | United Kingdom customer service: +44 (0) 1925 855330 Fax: 01925 855350

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