

MULTIFLOW 715

Aerated Mortar Plasticizer and Integral Waterproofer for the Production of Lightweight Concrete and Screeds by the Entrainment of Air

Description

MULTIFLOW 715 is a liquid admixture combined with an acrylic waterproofer for use in the production of lightweight concrete. This material consists of surface active agents of the aromatic sulphonate type, incorporating Polyhydroxylated Polymers and thereby improving stability in the amount of air entrained.

Typical Uses

An air entraining, waterproofing and pre-foaming agent in:

- * Lightweight concrete and screeds
- * Waterproofing concrete
- * Insulating screeds
- * Cellular concrete
- * Precast concrete
- * Lightweight concrete blocks
- * For all conventional low cost housing, buildings and specific industrial structures

Advantages:

- * Uniform entrapment of air bubbles
- * Less air bubble breakdown
- * Consistency of mortar mixes
- * Reduced likelihood of efflorescence
- * Reduces capillary rise
- * Increases workability
- * Reduces bleeding and segregation
- * Produces better bonding characteristics to other materials
- * Is plastic and cohesive
- * Lower density
- * Enhances thermal insulation properties
- * Better resistance to de-icing salts

Typical Properties:

Specific Gravity:	1.19 at 20°C
Chloride and Nitrate Content:	Nil
Freezing Point:	0° C - can be reconstituted if stirred after thawing
Flash Point:	None
Air Entrainment:	Between 12% and 17% dependant on grading of sand.

Method of Entraining

Requires normal, efficient mixing equipment which is simpler to the pre-foaming method. This method is applicable to mixes containing sand and cement in proportions ranging from 2:1 to 5:1 producing concrete/ mortar densities between 1600kg / m³ and 1750kg / m³. Composition of the mix proportions and the type of equipment being used will be the determining factor the more vigorous the agitation, the better the entrainment of air.

Best results are achieved by charging half the quantity of sand, followed by the water and MULTI FLOW 715 and mixing for one minute. Mix thoroughly before adding the cement and the remainder of the sand, then mix together for at least 2-3 minutes. Extended agitation improves air entrainment.

MULTIFLOW 715 can also be introduced by the pre-foaming method. However, this method requires more elaborate equipment and is only recommended for making lightweight aerated concrete screeds, cellular and insulating products.

Typical Results

A compressive strength at 28 days of between 8 MPa and 12 MPa can be expected when water cured at 22° C.

Densities

Cubes, when made, should be air dried for 48 hours at 23° C and a humidity of 25% to 50%. This air drying will eventually achieve densities between 1600kg / m³ and 1750kg/m³

Technical Assistance

MCC LIMPOPO will provide technical support to evaluate the optimum use of this product.

Packaging

Supplied in 25 and 200

Quality Assurance

MCC LIMPOPO production and testing programmes comply with local testing standards

Updates

This data sheet supersedes all previous issues prior to this date: 31/05/97.