

# **Ultplast G30**

HIGH RANGE WATER REDUCER/SUPERPLASTICIZER

#### PRODUCT DESCRIPTION

**Ultplast G30** is Ultplast G30 is a highly effective admixture for concrete especially suitable for the production of free flowing concrete and for the production of high strengths concrete, especially in hot climatic conditions. Ultplast G30 disperses the fine particles in the concrete mix, enabling the water content of the concrete to perform more effectively.

#### **ADVANTAGES**

- Makes possible major reduction in water cement ratio which allows the production of high strength Concrete without excess cement content.
- Increasing workability levels are maintained for longer period than ordinary admixtures.
- Chloride free, safe for use in prestressed and reinforced concrete.
- Improvedcohesion and particle dispersion minimizes segregation and bleeding and improve pump ability

# **USES**

- To provide excellent acceleration of strength gain at early ages and major increase strength at all ages by significantly reducing water demand in a concrete mix.
- · Particularly suitable for high strength and free flowing concrete
- · Significantly improve the workability ready mix concrete without increasing water demand
- · To improved concrete durability by increasing ultimate strength and reducing concrete permeability

# **STANDARD COMPLIANCE**

Ultplast G30 confirms with BSEN 934-2 and ASTM C494 as Type G and F depends on dosage used.

# **DOSAGE**

For high strength, high workability concrete the normal dosage range if from 0.5 to 2.5 % of cement weight.

# Use at other dosages

Dosage outside the normal range quoted above can be used to meet particular requirements, contact Ultimate technical teams for advice.

# **Effect of overdosing**

An overdose of Ultplast G30 will result in an increase in retardation as compared to the normally obtained. Provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired by increased retardation and will generally be increased.



#### **INSTRUCTION FOR USE**

## **Mix Design**

When the main requirement is to improve strength, Initial trial should be made with normal concrete mix design. The addition of admixture will allow the removal of water from the mix whilst maintaining workability. After initial trials minor modification to the overall mix design may be made to optimize performance.

The admixture should be added to the concrete with the mixing water to obtain the best result. Where high workability concrete required from normal workability concrete delivered to site, Ultplast G30may also added to concrete direct into a ready-mix truck. Full blending of admixture and the concrete should be ensured by mixing at high speed for a period of at least two minutes.

#### **PROPERTIES**

Appearance	Dark Brown Liquid
Specific Gravity (BSEN 934-2)	1.23 @ 22 ± 2 o C
Water soluble chloride (BSEN 934-2)	Nil to BS 5075
Alkali Content	Typically less than 40g. Na2O equivalent/liter of admixture

#### **COMPATIBILITY**

Ultplast G30 is compatible with other Ultimate admixtures products except Polycarboxylate based ones used in the same concrete mix. All admixture should be added to the concrete separately and must not be premixed together prior to addition. The resultant properties of concrete containing more than one admixture should be assessed by trial mix.

Ultplast G30is suitable for use with all types of Portland cement and cement replacement material such as GGBS, PFA, SRC cements and micro silica.

#### **Technical Support**

Ultimate provide a technical advisory service for on-site assistance and advice on mix design, admixture selection, evaluation trials and dispensing equipment.

#### **PACKAGING**

Ultplast G30 is available in 25, 200, 1000 liters or bulk supply. For potential customers like Ready-Mix Concrete suppliers storage tanks can be supplied.

#### Storage

Ultplast G30 has a minimum shelf life of 12 months provided the temperature is kept within the range of 2 oC to 50 oC.

# **HEALTH AND SAFETY**

Ultplast G30 does not fall into the hazard classifications or current regulations. However, it should not be swallowed or allowed to come into contact with skin and eyes.

Suitable protective gloves and goggles should be worn.

Splash on the skin should be removed with water. In case of contact with eyes rinse immediately with plenty of water and seek medical advice. If swallowed seek medical attention immediate.

**IMPORTANT NOTE:** Ultimate products are guaranteed against defective material and manufacture are sold subject to its standard conditions for the supply of goods and service.