

Ultplast G50

A high-performance concrete hyper-plasticizer based on Polycarboxylic technology

PRODUCT DESCRIPTION

ULTPLAST G50 is based on a special carboxylic ether polymer with long lateral chains. Thus, cement dispersion is substantially enhanced. An electrostatic dispersion occurs at the beginning of the mixing process, but the lateral chains connected to the polymer backbone provide a steric barrier that stabilizes the cement particles' ability to split and disperse. With the help of this technology, flow able concrete requires significantly less water. ULTPLAST G50 is a particularly strong hyper-plasticizer allowing production of consistent concrete properties around the required dosage.

ADVANTAGES

- Increased early and ultimate compressive strengths
- Increased flexural strength and durability
- Improved adhesion to reinforcing and stressing steel
- Better resistance to carbonation and Lower permeability
- Better resistance to aggressive atmospheric conditions
- Reduced shrinkage and creep

USES

ULTPLAST G50 is a high-performance hyper-plasticizer intended for application where increased early and ultimate compressive strengths are required and it has been developed for use in:

- Self-compacting concrete
- Pumped concrete
- Concrete requiring long workability retention
- High-performance concrete
- Pre-cast concrete

STANDARD COMPLIANCE

ULTPLAST G50 confirms with ASTM C494 as Type F on dosage used.

DOSAGE

The optimum dosage of ULTPLAST G50 to meet specific requirements should always be determined by trials using the materials and conditions that will be experienced in use. The normal dosage range is between 0.5 to 3.0% of cementitious material.

Use at other dosage

Dosage outside the normal range quoted above can be used to meet particular mix requirements. Contact ultimate technical teams for advice.

Effects of overdosing

Over-dosage may cause delay in the setting time.

Instruction for use

Mixing

When at mixing plant, ULTPLAST G50 should be added in the mixing water. In some instances, e.g. addition to ready mix concrete on site

For self-compacting concrete, a viscosity enhancer e.g. ULTPLAST G50 is recommended at a dosage between 1.0 to 4.0 liter per cubic meter

Dispensing

The correct quantity of ULTPLAST G50 should be measured by means of a recommended dispenser. The admixture should then be added to the concrete with mixing water to obtain the best results.

Contact ultimate technical team for advice.

PROPERTIES

Appearance	Light Yellow colored liquid
PH	6.5
Volume Mass	1.08 ± 0.03 @20oc
Alkali Content	Typically less than 1.5 gm. Na2O equivalent/liter of admixture

COMPATIBILITY

ULTPLAST G50 should not be used in conjunction with any other admixture unless prior approval is obtained from your local office

ULTPLAST G50 is suitable for use with all types of Portland cements and cement replacement materials such as PFA, GGBFS, SRC 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 G50 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 G50 has a minimum shelf life of 12 months provided the temperature is kept within the range of 2oC to 50oC.

HEALTH AND SAFETY

ULTPLAST G50 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.