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BUILDING CHEMICALS SPECIALISTS

UNIPLAST C09PL

Set Water Reducing / Plasticising Concrete Admixture

USES

- To reduce the **w/c** ratio of a concrete mix and to improve workability.
- To increase workability.
- To increase early compressive strengths.

ADVANTAGES

- Chloride free, safe to be used in reinforced and prestressed concrete.
- Specified strength grades can be achieved at reduced cement content.
- Reduces concrete permeability and limits water absorption, thus enhancing concrete durability.
- Achieved water reduction improves significantly compressive strengths at all ages.
- Allows workability to be increased without adding extra water, thereby maintaining strength levels.
- Minimizes the risk of segregation and bleeding and assists in the production of a dense, close textured surface, improving durability.

STANDARD COMPLIANCE

UNIPLAST C09PL complies with **CYS EN934-2:2009 +A1:2012 Table 2 - *Specific requirements for set water reducing /plasticizing admixtures (at equal consistence).***
UNIPLAST C09PL is certified by **CERTIF** (Certification Organization) with the Certificate of the **Factory Production Control** with Certificate Number **1328 - CPR - 0063** and bears **CE marking.**

PROPERTIES

Appearance:	**Liquid**
Colour:	**Brown**
Specific Gravity:	**1,165± 0,01** at 20°C
pH:	**6,75 ± 1,0** at 20°C
Chloride Content:	**Chloride Free**

PRODUCT DESCRIPTION

UNIPLAST C09PL is a blend of lignosulphonates and other inorganic and organic chemicals which is easily dispersed in water.
UNIPLAST C09PL entrains less **than 2%** of additional air to concrete at normal dosages.
UNIPLAST C09PL disperses the fine particles of cement in the concrete mix, enabling the water content to perform more effectively thus improving concrete consistency and increased workability.
This produces higher levels of workability for the same water content, allowing benefits such as water reduction and increased strengths to be taken.

DOSAGE

Trials should be carried out with the proposed concrete mix in order to determine the optimum dosage of **UNIPLAST C09PL**.

Suggested starting point dosages are **0.10 to 0.40 litres / 50 kg of cement.** Higher dosages may be used under adequate supervision and will impart superpalsticising properties and extended workability**.**

UNIPLAST C09PL is compatible with all types of cement which are produced in Cyprus and performs extremely well with **microsilica**. It can also be combined with all other Concrete Admixtures manufactured by our company

DISPENSING

UNIPLAST C09PL is measured using a suitable dispenser. To obtain the best results it should always be added to the concrete mix dissolved in the water.

Overdose might cause increased air entrainment, which could lead to reduced strengths.
Also, overdose will not result a big effect in retardation but will improve workability without adding extra water.

CURING

Good curing will always lead to low permeability concrete and good curing practice should be always maintained especially at high temperatures and when increased dosages of **UNIPLAST C09PL** are used. Curing membrane, water spray or wet hessian should always be used.

COMPARATIVE RESULTS between control (only water) & Test with UNIPLAST C09PL at equal consistence

	Dosage C09PL (Litres)	Cement Content (Kg/m³)	W/C ratio	Reduce Water %	Air Content (%)	Slump (mm)	Compress. Strength in 28 days (N/mm²)
Control (only water)	**-**	**350**	**0,62**	**-**	**1,9**	**120**	**30,0**
Test (with C09PL)	**1,5**	**350**	**0,54**	**13%**	**3,0**	**120**	**37,0**

PACKAGING - STORAGE

UNIPLAST C09PL is delivered in **210** Litres metal drums, **1000** Litres plastic containers.
UNIPLAST C09PL has a minimum shelf life of 12 months provided is stored between **2º C** and **40º C**. The material freezes at **-4 º C**. It is necessary to protect material from direct sunlight and frost.

PRECAUTIONS

UNIPLAST C09PL is water based and is non-flammable.
UNIPLAST C09PL should not be swallowed. Contact with skin and eyes should be avoided. In the event that it comes in contact with the skin rinse thoroughly with plenty of water. In case of contact with eyes rinse immediately with water and seek medical attention immediately.
For more information on secure management and storage please request the **SAFETY DATA SHEET**.