



# **BUILDING CHEMICALS** **SPECIALISTS**

## **UNIPLAST NC**

### **Set Accelerating Concrete Admixture**

#### **FRINICS CHEMICALS LTD**

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#### **USES**

- To accelerate the setting and early strength gain of concrete and mortar mixes without the introduction of chloride.

#### **ADVANTAGES**

- Chloride free, safe to be used in reinforced and prestressed concrete.
- Achieved High early strength with ordinary and rapid setting cements.
- Achieved water reduction improves significantly compressive strengths at all ages.
- Early setting provides improved resistance to frost attack.
- Can be used with all types of Portland cement and equally with all concrete and bricklaying mortar mixes.

#### **STANDARD COMPLIANCE**

UNIPLAST NC complies with **CYS EN934-2:2009 +A1:2012 Table 6 - Specific requirements for set accelerating admixtures (at equal consistence).**

UNIPLAST AE121 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: **Light Straw**  
 Specific Gravity: **1,265± 0,01** at 20°C  
 pH: **9,75 ± 1,0**  
 Chloride Content: **Chloride Free**

#### **PRODUCT DESCRIPTION**

UNIPLAST NC is a blend of inorganic and organic chemicals which is easily dispersed in water.

UNIPLAST NC entrains less **than 2%** of additional air to concrete at normal dosages.

The addition of UNIPLAST NC to concrete mixes accelerates both the setting and rate of strength gain. The strength improvements are most significant during the first 18 hours. If no change is made in the water/cement ratios, the ultimate strengths will be similar to those obtained using the same mixes without UNIPLAST NC.

The accelerating and water reducing properties can be used to improve both early and ultimate strengths achievable even with Rapid hardening cement. This can enable economic and practical alternatives to high alumina cement mixes to be produced for high early strength applications.

#### **DOSAGE**

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

Suggested starting point dosages are **1.15 to 1.30 litres / 50 kg of cement**. Higher dosages may be used under adequate supervision.

UNIPLAST NC is compatible with all types of cement which are produced in Cyprus. It can also be combined with all other Concrete Admixtures manufactured by our company.

UNIPLAST NC is an effective plasticiser and the water content of the mix can generally be reduced whilst still maintaining the same workability. This will give increased ultimate and early strength. It is recommended that site trials with the particular aggregates and cement are carried out to determine final mix proportions

### **DISPENSING**

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

UNIPLAST NC should be stirred before use.

An overdose of double the recommended amount of UNIPLAST NC will result in a slight increase in initial acceleration, but will not materially alter the ultimate strength or characteristics of the cured concrete or mortar.

### **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 NC are used. Curing membrane, water spray or wet hessian should always be used.

### **PACKAGING - STORAGE**

UNIPLAST NC is delivered in **20 Litres** and **210 Litres** plastic drums.

UNIPLAST NC has a minimum shelf life of 12 months provided is stored between **2° C** and **40° C**. The material freezes at **-4° C**. It is necessary to protect material from direct sunlight and frost.

### **PRECAUTIONS**

UNIPLAST NC is water based and is non-flammable.

UNIPLAST NC 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**.



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