# CHRYSO®Xel AD



# **New Generation Plasticizing and Accelerating Admixture**

#### Description

CHRYSO®Xel AD is a liquid accelerator and plasticizing agent, it accelerates the setting and hardening of a concrete mix, thereby achieving high early strength with all the resultant advantages of speeding up the job. These accelerating properties of can be utilized in many ways, all of which can be shown to save time and money.

#### **Indicative characteristics**

: Light Amber Liquid Form Specific Gravity : 1.115 ± 0.02

Air entrainment : ≤ 1.5 % over control mix.

Ηα : ≥6

**Chloride Content** : Nil, as per BS - 5075 (Part-I) Compatibility : OPC, PSC, SRC & PPC.

#### Advantages:

- Enables drastic reduction of water cement ratio.
- Cement savings can be brought about by fine tuning the
- Reduces setting time.
- Makes concrete dense and cohesive, preventing segregation.
- Excellent for cold weather concreting, as it acts like an anti-
- Substantially enhances early age strength(28 days strength can be attained in 7 days)
- Allows early demolding of shutters/formwork.
- Makes concrete impervious, thereby improving durability.
- CHRYSO®Xel AD is strongly recommended for pre-cast concrete, structural concrete for roads, pavements, Runways and flooring because of the following advantages:-

### PRE-CAST CONCRETE

In all types of pre-cast/pre-stressed concrete work, where earlier release from moulds and handling of units is essential for economical production of concrete. CHRYSO®Xel AD is invaluable throughout the whole year, as the rate of addition is adjustable to meet variations in operating temperatures

# **CHARACTERISTICS:**

: Brown liquid **Appearance Specific Gravity**  $1.36 \pm 0.02$ 

Air entrainment  $\leq$  1.5 % over control mix.

# PRE-CAST CONCRETE

In structural concrete involving expensive shuttering, CHRYSO®Xel AD enables earlier sticking and re-utilization of form work, which offers immediate appeal for speed and economy.

#### **PACKAGING**

CHRYSO®Xel AD is available in 25, 100 and 250 kg plastic drums...

#### **PAVEMENTS, FLOORS, ROADS AND RUNWAYS**

In concrete, grano floors, roads, runways, hardstandings and pavements, the ability to occupy the area in the shortest possible time after laying, is an obvious factor in favor of using CHRYSO®Xel AD. Where accelerated hardening of granolithic floors is required, care must be taken that the setting/shrinkage is kept to an absolute minimum. CHRYSO®Xel AD enables a fully workable granolithic mix which can be produced with a lower water/cement ratio. It will reduce the setting/shrinkage factor and the risk of lifting and/or cracking of the top surface. Additionally, the improved cohesion of the mix enables a smooth, hard wearing surface to be achieved without the production of excessive laitance. CHRYSO®Xel AD is strongly recommended in all such concrete, which will subsequently be vacuum de-watered or for broad casting with floor hardeners.

In the sole interest of economy, CHRYSO®Xel AD allows the use of leaner mixes to meet specified strength requirements. The strength of concrete of a given mix proportion is related to the water/cement ratio – the lower the water content, the higher the strength. Therefore, CHRYSO®Xel AD gives higher strength through its plasticizing properties, plus early strength and early hardening. It also provides a means of maintaining equivalent strength at a reduce cement content, by fine tuning the mix.

#### APPLICATION:

CHRYSO®Xel AD is supplied ready for use and it should be added to the gauging water. It should not be added neat, directly to the dry mix. No extension of normal mixing time is necessary.

### **GUIDLINE FOLLOWED:**

ASTM C-494 Type-E, IS 9103:2007.

The dosage of CHRYSO®Xel AD varies from 0.3 to 1.5 litres per 50 kg of cement, depending upon the amount of acceleration of hardening required and the ambient conditions, The exact dosage should be determined by site trials. For normal acceleration of hardening and emergency repairs, or very early form release, the dosage of CHRYSO®Xel AD should be approximately 1 litre per 50 kg cement. However, trial mix is recommended for dose fixation. CHRYSO®Xel AD is compatible with all types of Portland Cement, blended cements and special cements. But Portland cement is preferable among all. CHRYSO®Xel AD is formulated from carefully selected raw materials

and manufactured under controlled conditions to give a uniform and consistent product.

# **HANDLING:**

CHRYSO®Xel AD is formulated from chemicals which present no fire or health hazards.

# Safety

Before use, refer to the Material Safety Data Sheet. The MSDS is available on www.chryso.com.



