

# CIS CHEM SUPERPLAST -120

HIGH WATER REDUCING AND WORKABILITY SUPERPLASTICIZER

PRODUCT CATEGORY: POLYCARBOXYLIC ETHER BASED ADMIXTURE

## PRODUCT DESCRIPTION

CIS SUPERPLAST 120 is a superplasticiser for concrete. It contains state of the art polycarboxylate ether polymers and is specially formulated to give exceptionally high water reduction and enhances workability for sprayed concrete mix designs. It is a non-chloride liquid admixture, which complies with the requirements of EN 934-2, as a high range water reducer / superplasticising admixture for concrete. It is compatible with all cements meeting recognised international standards. It requires a lower dosage compared to conventional superplasticisers but provides extreme workability characteristics for high slump, flowable concrete with greatly reduced water demand.

## USES

- High performance concrete
- Improving mixing efficiency during large pour
- Highly flowable concrete
- Highly durable concrete
- High strength concrete
- Ready-mix concrete
- Mass concrete
- Pumped concrete and wet sprayed concrete

## CHARACTERISTICS / ADVANTAGES

High water reduction which provides high early and ultimate strengths, low permeability and high durability of the concrete.

- High flow ability provides easy placement and compaction.
- Excellent cohesion, zero segregation and minimal bleed water with extremely high levels of concrete
- Exceptional slump retention and easier placement and delivery control especially under warm climatic conditions.
- High elastic modulus, low shrinkage and creep are achievable using graded coarse and fine aggregates.
- Superior finishes with reduced honeycombing



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## PRODUCT INFORMATION

Composition	Aqueous solution of modified polycarboxylates, co-polymers
Packaging	250 KG
Appearance / Colour	Light brown to brown liquid
Shelf life	12 months from date of production if stored properly
Storage conditions	Store in undamaged, unopened, original sealed packaging in dry conditions at temperatures between +5 °C and +45 °C. Protect from direct sunlight and frost
Density	~1.12 GM/ML (25 °C)
Total chloride ion content	Nil (EN 934-2)
Concreting guidance	The standard rules of good concreting practice for production and placing must be observed when using CIS SUPERPLAST 120 In concrete. Refer to relevant standards. Fresh concrete must be cured properly especially at high temperatures in order to prevent plastic and drying

## APPLICATION INFORMATION

Recommended dosage	0.4 - 2.0 % by weight of binder Higher dosages by weight of binder can be used depending on the mix design, raw materials, climatic conditions and concrete requirements. Trial mixes must be performed to establish the exact dosage rate required.
Compatibility	CIS SUPERPLAST 120 may be combined with all types of Portland cement We recommend to perform trial mixes to establish the required performance when combined with the above products.  Please consult our CIS Technical Department.

## HEALTH AND SAFETY

CIS SUPERPLAST 120 is added to the gauging water or simultaneously poured with it into the concrete mixer at the batching plant. Do not add CIS SUPERPLAST 120 directly to the dry mix. For optimum utilization of its high water reduction property we recommend thorough mixing at a minimal wet mixing time of 60 seconds. The addition of the remaining gauging water (to fine tune concrete consistency) may only be started after two-thirds of the wet mixing time to avoid surplus water in the concrete.