



HYPERPLAST 920

PRODUCT CODE : 128

PC Based Water Reducing slump retaining Superplasticiser

■ Description

HYPERPLAST 920 is a new generation super plasticisers based on polycarboxylate ether. It is developed to achieve high early strengths for all grades of concrete where high early strength and performance is required.

- **HYPERPLAST 920** is compatible with all Portland cements meeting recognised international standards and is free from chlorides and has been formulated to comply with ASTM C494 for Types A and F admixtures.

Typical Applications:

- ❖ Pumped concrete
- ❖ Self compacting concrete
- ❖ High Grade concrete (M45 and Above)
- ❖ Concrete requiring long workability and Long retention.

■ Action

- **HYPERPLAST 920** is differentiated from conventional superplasticisers in that it is based on a unique polycarboxylate ether polymer with long lateral chains. Conventional superplasticisers, such as those based on sulphonated melamine and naphthalene formaldehyde condensates, at the time of mixing, get adsorbed onto the surface of the cement particles.
- This adsorption takes place at a very early stage in the hydration process. The sulphonic groups of the polymer chains increase the negative charge on the surface of the cement particle and dispersion of the cement occurs by electrostatic repulsion.
- The long lateral chains of **HYPERPLAST 920** greatly improve cement dispersion. At the start of the mixing process the same electrostatic dispersion occurs as described previously but the presence of the lateral chains, linked to the polymer backbone, generate a steric hindrance that stabilises the cement particles capacity to separate and disperse. This mechanism provides flow-able concrete with greatly reduced water demand.
- The excellent dispersion properties of **HYPERPLAST 920** make it the ideal admixture for precast concrete where low water cement ratios are required. This property allows the production of very high early and high ultimate strength concrete with minimal voids and therefore optimum density. Due to the strength development characteristics, the elimination or reduction of steam curing in precast works may be considered as an economical option. With high workability without segregation or bleeding, less vibration is required.

■ Advantages

High water reduction:	Excellent early and ultimate strengths. Possibility of elimination of steam curing. Less permeable, highly durable concrete.
High flow-ability:	Ease of placing and compaction. Less vibration required even in case of steel reinforcement congestion. Less workmanship required.
Non retarding:	Faster turn around of forms and shorter stripping times.
Superior workability:	Improves concrete finish. Excellent surface appearance and texture.
Reduced slump loss:	No re-tempering. Ease of delivery to point of placement. Low shrinkage and creep Improves dimensional stability. Reduces risk of cracks. Superior cohesion Ease of pumping. High elastic modulus Superior load bearing capacity. Minimal bleed water. Excellent concrete quality.



HYPERPLAST 920

PRODUCT CODE : 128

Properties

Appearance:	Golden yellow colored liquid
pH:	6.5-7.5
SG @ 25°C:	1.02 ±05 gm/cc
Viscosity on B4 Ford Cup:	25 ±5sec
Chloride content:	Nil to IS: 456
Alkali content:	Typically less than 1.5 g /Liter of (<i>Di-Sodium Oxide equivalent</i>) admixture.

Dosage

The normal dosage for **HYPERPLAST 920** is between 500 and 1500ml per 100kg of cementitious materials. Dosages outside this range are permissible subject to trial mixes. Dosage outside the normal range quoted above can be used to meet particular mix requirements. Contact **ROKSO** Technical staff for advice in these cases .

Effects of overdosing

Over dosage may cause delay in the setting time.

Dispensing

HYPERPLAST 920 is a ready-to-use admixture that is added to the concrete the time of batching. The maximum effect is achieved when the **HYPERPLAST 920** is added after the addition of 50 to 70% of the water. **HYPERPLAST 920** must not be added to the dry materials. A separate dispenser and feed line must be used.

Packaging

HYPERPLAST 920 is available in 230kg drums or in bulk delivery.

Shelf life

HYPERPLAST 920 can be stored for 6 months if stored at temperatures above 5°C, in tightly sealed original drums. If found to be frozen, thaw it and reconstitute by stirring.

Precautions

Health: **HYPERPLAST 920** does not contain any hazardous substances requiring labeling. It is safe for use with standard precautions followed in the construction industry, such as use of hand gloves, safety goggles, etc. For detailed Health, Safety and Environmental Recommendations, please consult and follow all instructions in the product Material Safety Data Sheet.

**Manufactured in INDIA by
ROKSO INDIA PRIVATE LIMITED**

AN ISO 9001 : 2008 CERTIFIED COMPANY

ADMN.OFFICE: 602,SAI JANAK CLASSIC,ABOVE MURLIDHAR SWEETS, NEAR FLYOVER BRIDGE, DEVIDAS LANE, BORIVALI (W) MUMBAI-92
REGD OFFICE : 202,MADHUVAN,SHRI KRISHNA COMPLEX,NR.SHRIRAM NAGAR,VIVA COLLEGE RD,VIRAR(WEST) DI :PALGHAR -401303 MS
E-MAIL : info@roksoindia.com / WEB SITE : www.roksoindia.com

The data & guidelines provided hereabove is based on compiled information which we believe reliable. Users are requested to test all the applications independently before commercial use. This data & informations are non binding & we donot assure any liability for failure of any guidelines or performance of the product as correct identification of the problem, quality of the other materials & on-site workmanship are factors beyond our control.