

# CHEMCRETE HP3

Larsen Chemcrete HP3 is a '3rd generation' high performance superplasticiser/high range water reducer. HP3 is a solution of a polycarboxylate polymer and acts through a steric repulsion mechanism. This permits high workability or water reduction of up to 30%. Where normal superplasticisers like melamine and naphthalene sulphonates operate through an electrostatic repulsion mechanism, the improved performance of 3rd generation superplasticisers like HP3 results from a mechanism based on steric hindrance. This mechanism is more efficient at dispersing and maintaining dispersion of the cement and filler particles and allows high workability and slump retention without retardation effects.

**BS EN 934-2 Table 3.1/3.2**  
**UP TO 30% WATER REDUCTION**  
**INCREASES WORKABILITY**  
**HIGH EARLY STRENGTHS**  
**HIGH ULTIMATE STRENGTHS**  
**NO RETARDATION AT NORMAL DOSAGES**  
**IDEAL FOR PRECAST CONCRETE AND FLOORING**  
**APPLICATIONS**

## TECHNICAL INFORMATION

**FORM:** Liquid

**COLOUR:** Amber

**SPECIFIC GRAVITY:** ~1.07 g/ml

**pH:** ~6.0

**CHLORIDE CONTENT:** <0.1% w/w

**FREEZING POINT:** 0°C

**EFFECT ON SETTING:** Negligible

**AIR ENTRAINMENT:** <1% increase

## **DIRECTIONS FOR USE:**

### **DOSAGE**

Chemcrete HP3 is supplied ready for use and should be added with or after the mixing water. Do not add directly to dry cement. As Chemcrete HP3 has a wide range of applications dosage may vary between 0.2 – 1.0% by weight of cement. As such, trial mixes should be carried out to determine the optimum dosage rate.

### **COMPATIBILITY**

Chemcrete HP3 can be used with all types of Portland cement. It can also be used with other admixtures. When used in conjunction with other admixtures each must be dispensed separately into the concrete mix. Please consult our Technical Department.

### **OVERDOSAGE**

Severe overdosage can cause retardation, air entrainment and increased workability leading to segregation.

### **STORAGE**

This product must be stored in closed containers protected from extremes of temperature. If the product has frozen, thaw at temperatures above +4°C and reconstitute by mechanical agitation only.

### **SHELF LIFE**

12 months in unopened manufacturer's containers.

### **PACKAGING**

Chemcrete HP3 is supplied in 25L, 200L and bulk if required.