

SOPRAPlast BD

Water Reducing Plasticizer Retarder

Description

SOPRA Plast BD is a water reducing plasticizer retarder for concrete. It is specially formulated, based on a chloride-free high sugar lignosulphonate system, to provide excellent long term retardation.

Uses

- * Ready mixed concrete in hot weather.
- * Long distance deliveries of ready mixed concrete in mixer trucks.
- * Concrete for pumping and precast.

Advantages

- * Easier placement at high ambient temperature for long distance deliveries.
- * Compatible with all types of cement and cements containing clinker, blast furnace slag or micro silica.
- * Increased ultimate strength.
- * Improves hydration resulting in higher impermeability to water.
- * Compatible with most other SOPRA admixtures.

Standards Compliance

ASTM C 494 types B and D,
BS 5075 Part 1.

Packaging

210 litre drums or 1000 litre containers.
Tanker loads are also available.

Storage

12 months storage life when stored in original containers at between 2 and 35°C in a shaded place.

Properties

Appearance	Brown liquid
Specific gravity @ 25 °C	Typically 1.20
pH	3.9 - 4.10
Air entrainment, %	< 2.0
Chloride content BS 5075	Nil
Flammability	Non-flammable

Performance Guidelines

Concrete mix (per m ³)	5/20 gravel	1140 kg	
	0/5 sand	780 kg	
	OPC	350 kg	
Dosage (l/100kg of cement)	0	0.40	0.60
Water, l/m ³	175	160	150
Slump, mm	20	35	45
Air content, %	1.6	1.6	1.7
Compressive strength, N/mm ²			
1 day	14.2	19.7	21.2
3 days	20.5	24.1	29.2
28 days	30.2	43.1	45.0
Slump Retention @ 25°C			
Mix (W/C 0.55)	Dosage %	Slump, mm	
		Initial	60 min
Control	0	50	0
SOPRA Plast BD	0.6	130	60

Application Instructions

Dispensing
The correct quantity of SOPRA Plast BD should be measured using a recommended dispenser. It should be added to the concrete with the mixing water to obtain the best results.

Dosage

The normal dosing range is 0.2 - 0.6 litres per 100 kg of cement, including any cement replacement material. The optimum dosage of SOPRA Plast BD to meet specific requirements should be determined by trials using materials and conditions as encountered on site.

Overdosing

Exceeding the recommended dose of SOPRA Plast BD will result in an increase in retardation and workability, but provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired. The effects of overdosing will be increased if cement replacement materials or Type V cement is used. Overdosing may also increase air entrainment which tends to reduce strength.

Curing

Normal curing methods to protect concrete surfaces should be adopted.

Cleaning and Disposal

Spillages of SOPRA Plast BD should be hosed down with large quantities of water or absorbed on to fine sand and disposed of in accordance with local legislation.

Precautions

Health and Safety

SOPRA Plast BD is acidic but non-hazardous. It should not be swallowed or allowed to come into contact with skin or eyes. Suitable protective goggles and gloves should be worn. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice. When contact with the skin is made, wash off immediately with soap and water. If swallowed, seek medical attention immediately, do not induce vomiting.

Technical Support

SOPRA provides on-site assistance and consulting services on projects when requested. Technical data sheets on other SOPRA products and guidance on their use are available on request.

Warranty

SOPRA products are guaranteed against defective materials and manufacture and sold subject to SOPRA standard terms and conditions of sale. Whilst SOPRA endeavours to ensure that any advice, information or recommendation given is correct, the company can not accept any liability either directly or indirectly arising from the use of its products, since the company has no control over the application of its products. Information contained in this document is given on the best current knowledge. SOPRA policy is one of continuous improvement and the company reserves the right to change its products without prior notice.