

SOPRA Plast A

Normal Water Reducing Plasticizer

Description

SOPRA Plast A is a water reducing plasticizer for concrete based on a chloride - free lignosulphonate formulation which also acts as a powerful dispersing agent.

Uses

- * Ready mixed concrete.
- * Pumped concrete.
- * Precast concrete.
- * Conventional concreting applications

Advantages

- * Easier placement without additional water.
- * Increases compressive strength
- * Chloride-free, safe for use in pre-stressed and reinforced concrete.
- * Compatible with all types of cement and cements containing clinker, blast furnace slag or micro silica.
- * Compatible with most other SOPRA admixtures.
- * Suitable for use in Middle East conditions.

Standards Compliance

ASTM C 494 Type A
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 1.18
pH	3.8 - 4.4
Chloride content, BS 5075	Nil
Flammability	Non-flammable

Performance Guidelines

Concrete Mix (per m ³)			
5/20 gravel, kg	1140		
0/5 sand, kg	780		
OPC, kg	350		
Dosage (l/100kg of cement)	0	0.30	0.70
Water, l/m ³	190	179	165
Slump, mm	40	60	75
Air content, %	1.7	2.0	2.1
Setting time @ 25 °C, hr			
Initial	4.0	4.6	6.5
Final	7.0	8.5	11.0
Compressive Strength, N/mm ²			
1 day	9.5	10.6	10.9
3 days	16.1	18.0	20.2
7 days	24.1	32.1	34.8
28 days	32.2	38.2	40.1

Application Instructions

Dispensing

The correct quantity of SOPRA Plast A 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 dosage range is 0.3 - 0.7 litres per 100 kg of cement, including any cement replacement material. The optimum dosage of SOPRA Plast A to meet specific requirements should be determined by trials using the materials and conditions as encountered on site. Increased doses will be required at high ambient temperatures.

Overdosing

Exceeding the recommended dose of SOPRA Plast A 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. Overdosage 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 A 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 A 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.