

SOPRA Fluid G

Superplasticizer with Workability Retention

Description

SOPRA Fluid G is a superplasticizer for concrete mix designed to retain workability and to increase the fluidity without affecting the strength. It is based on a chloride-free lignosulphonate and synthetic polymer system.

Properties

Appearance	Brown liquid
Specific gravity @ 25C	Typically 1.18
pH	5.0 - 5.4
Chloride content BS 5075	Nil
Flammability	Non-flammable

Uses

- * Flowable concrete mixes.
- * Ready-mix concrete in hot weather.
- * Industrial floors.
- * Highly reinforced concrete.

Advantages

- * Easier placement without additional water.
- * Improves concrete cohesion.
- * Produces flowable concrete without additional water.
- * Minimises segregation and bleeding.
- * Compatible with all types of cement and cements containing clinker, blast furnace slag or microsilica.
- * Compatible with most other **SOPRA** admixtures.

Standards Compliance

ASTM C 494 Type G,
BS 5075 Parts 1 & 3.

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.

Performance Guidelines

Concrete Mix (Per m ³)	5/20 gravel	1140 kg
	0/5 Sand	780 kg
	OPC	350 kg

Dosage, l/100 kg of cement	0	1.5	1.5
Water / cement ratio	0.53	0.53	0.60
Slump (mm), initial	80	160	collapse
60 min.	20	80	110

Compressive Strength, N/mm²

1 day	7.9	11.0	10.8
7 days	19.6	26.0	28.3
28 days	26.8	32.0	34.7

Application Instructions

Dispensing

The correct quantity of **SOPRA** Fluid G should be measured using a recommended dispenser. It should be added to the concrete with the mixing water to achieve the required plasticity when used as water-reducer. For flowable concrete, the best results are obtained when **SOPRA** Fluid G is added after the mixing water has been added to the concrete. For ready mixed concrete, **SOPRA** Fluid G may be added in the truck mixer prior to placement of concrete and mixed again for two minutes before pouring.

Dosage

The normal dosage range is 0.5 - 1.5 litres per 100 kg of cement, including any cement replacement material. The optimum dosage should be determined by trials using the materials and conditions as encountered on site.

Overdosing

Exceeding the recommended dose will result in an increase in workability, but provided that adequate curing is maintained, the ultimate strength of the concrete will not be impaired.

Curing

Normal curing methods to protect concrete surfaces should be adopted.

Cleaning and Disposal

Spillages of SOPRA Fluid G should be hosed down with large quantities of water or absorbed onto fine sand and disposed of in accordance with local legislation.

Precautions

Health and Safety

SOPRA Fluid G 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.