

CAT. NO. ADM-13-2403

ISOLA PSM

High Range Water Reducing, Superplasticizing Admixture

ISOLA PSM is a high range, water reducing, superplasticizing admixture for concrete. The formulation is based on sulphonated naphthalene and does not contain chloride ion. Specially formulated for concrete containing microsilica and reactive pozzolans.

APPLICATION

ISOLA PSM is used to:

- Used in concrete of all classes -ready mix, prestressed, precast, shotcrete, etc.
- Increase workability – highly fluid, self-leveling pumpable concrete can be attained when added to a 50-75 mm slump. The increased fluidity is ideal for use in heavily reinforced sections requiring little or no vibration. The increase in slump do not lower the potential concrete strength.
- Reduce water content-25-30% water reduction can be attained while maintaining the same slump. This will result in a reduced cement if the objective is to maintain a fix water cement ratio without loss in strength. The water reduction will also result in a dense, water-impermeable concrete mass.
- Accelerate Strength- without reducing cement content, 70% of specified 28 days strength can be obtained after 24 hours, when used as a high range water reducer.

SPECIFICATION

ISOLA PSM complies with the requirements of BS EN 934-2:2009+A1:2012 (table 3.1 & 3.2).

ADVANTAGES

- **ISOLA PSM** produces low water-cement ratio concrete and consequently high strengths.
- **ISOLA PSM** produces flowing, self-leveling concrete with better than normal strengths.
- **ISOLA PSM** will produce waterproof concrete due to water-cement ratio attainable in the range of less than 0.4.
- **ISOLA PSM** will reduce cement content substantially without workability or strength loss.
- **ISOLA PSM** aids in concrete placement and consequently reduced labor cost and faster completion time of construction.
- **ISOLA PSM** reduces segregation and bleeding in plastic concrete.

DOSAGE

Depending on mix design requirement, **ISOLA PSM** can be added at the rate of 0.30-1 liter PER 50 Kg. bag cement (0.6-2.0 liters per 100 Kg.). When designing mixes for use with **ISOLA PSM**, it is recommended to make trial batches to determine optimum dosage. As a guide for designing mixes, ACI 211.1 or 211.2 recommendations should be followed. **ISOLA PSM** is also compatible with ISOPLAS BT water-reducing, retarding admixture.

ADDITION

ISOLA PSM can be added at the batch plant or at the site. However, the latter method of addition will result in longer workability and placement time. For central mix type operations, approximately 80% of the total amount mixing water is added to the dry ingredients. Mix for 30 seconds then add **ISOLA PSM** simultaneously with the remaining 20% mixing water. For 1 cubic meter batch, total mixing time from the time cement comes in contact with water should not be less than 100 seconds.

OVERDOSING

An overdosing of the recommended amount of **ISOLA PSM** may result in set retardation but it has been known that final properties will not be affected as long as the concrete is placed, consolidated, and cured properly in accordance with generally accepted concreting practice such as those recommended in ACI.

NOTES

- To prevent rapid loss of workability at ambient temperatures more than 32 degree C or windy weather, apply the precautionary methods detailed in ACI 305 R-77 "Hot Weather Concreting".

PACKING

In 210-liter drum or 1000 Liter Bulk.

HEALTH/ SAFETY

ISOLA PSM is mildly alkaline. Always wear protective hand gloves when handling. If accidentally splashed on the eyes, wash thoroughly with clean water, and seek medical attention.

SHELF LIFE

Twelve months in original container stored in warehouse condition below 30⁰ Celsius ambient temperature.

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Technical information, data are to be considered as typical values and not sales specification. Actual measured values may vary due to factors beyond our control. Indications concerning function and application of the products are empirical. Although the information is believed to be accurate, there is no warranty by ISOLA. None of the recommendations becomes part of the warranted quality of the products. Due to the fact that the conditions of individual use are beyond ISOLA's direct and continuous control, ISOLA disclaims all responsibility in connection with the use of its products and does not warrant against any loss direct or consequential

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