DESCRIPTION

EPOCON WR 100 is a mid-range water-reducing plasticizer. It confers higher compressive strength to concrete and mortar by reducing water demand and greater workability by dispersing cement particles.

CHARACTERISTICS

EPOCON WR 100 is economic water reducing plasticizer for concrete and mortar. It is a normal plasticizer while it acts as a super plasticizer when used at the upper limit.

USES

EPOCON WR 100 is recommended for all cement types, in the following areas:

- Ready to use concrete
- Heavy prefabrication
- General reinforced concrete
- Pumped concrete
- Pre-stressed concrete

Added to mortar, **EPOCON WR 100** improves workability of:

- Plaster and render
- Mounting mortar (blocks, bricks...)

ADVANTAGES

Increased workability: Reduces placing time, labour and equipment.

High strength concrete: Water reduction gives higher strengths without cement increase or workability loss

High early strength: Water reduction cans double the early age strength.

Reduced permeability: Reduction of Water reduces porosity giving improved water impermeability.

Surface finish: Better dispersion of cement particles and increased cohesion minimizes segregation and bleeding and gives improved surface finish.

Improved pumpability: Line friction is reduced by increasing workability and cohesion.

Chloride free: Safe in reinforced concrete.

TECHNICAL SPECIFICATION

Test Name	Average Result
Chemical Composition	Sulphonated Naphthalene modified
Form	Liquid
Colour	Dark Brown
Specific Gravity@20 ⁰ C	1.175 ± 0.01
рН	6.5 ± 1.5
Chloride content (%)	< 0.12
Freeze harm	Complete Stir or agitate the container before use
Freeze temperature	0°C
Boiling point	100°C
Odor	Mild odor
Toxicity	None
Flammability	None
Clean-up	Water
Fumes during treatment	Slight
Environmental Hazards	None
Air Entrainment	Up to 2.0% depending on dosage rate and concrete proportioning.











APPLICATION PROCEDURE

Mix cement (and pozzolanic materials), sand, aggregate and 50-70% of mixing water until a homogeneous mixture is obtained. **EPOCON WR 100** is poured into the concrete mix after the addition of the first 50 – 70 % of the mixing water. It is important that the mixing period should be sufficiently extended for the complete dispersion throughout the mix. **EPOCON WR 100** is added to the remaining mixing water until required workability and homogeneous mixture are obtained. (It is recommended to extend the mixing period 4 minutes)

COMPATIBILITY

EPOCON WR 100 can be used in all types of Portland cement, sulfate resisting cement and supplementary cementitious materials. EPOCON WR 100 should be dispensed directly into the mixer and should not be premixed with other admixtures. If other admixtures are to be used in concrete containing EPOCON WR 100, they must be dispensed separately.

CONSUMPTION

EPOCON WR 100 is used in a range of 0.5 to 1.5 Kg per 100 Kg of the cementitious material weight (Depending on climatic conditions, proportioning and other components of the concrete).

REMARKS

Usage dosages stated here under were obtained in laboratory conditions; they may change depending on the characteristics of other components, ambient conditions and water/cement ratio. Therefore, it is recommended that designs and tests should be conducted at sites using preliminary mixture ratios.

RELEVANT STANDARDS

ASTM C 494 Type A, BS 5075 Part I, BS EN 934 part 2 (TS EN 934-2)

PACKING

Plastic jerry can (30 Kg), Drums (250 Kg), Bulk (storage tanks can be provided for Bulk use)

SHELF LIFE

12 months indoors, without opening original package. The product should be stored in a cool, dry storage. Do not store at temperatures below 10 °C or in direct sunlight.

SAFETY PRECAUTIONS

As with all construction chemical products, adequate precautions and care must be taken during usage and storage. Avoid direct contact with foodstuff, eyes, skin, and mouth. Keep away from children and animals. Any direct contact with skin, eyes, etc. should be washed thoroughly with clean running water and soap. Use proper safety wear, goggles, and mask, etc.

TECHNICAL ASSISTANCE

EPO GULF SPECIALITIES technical department with its highly trained and qualified Chemicals Marketing Advisory team provides a complete service in the field. Please consult your nearest service/sales department for assistance. Field services where provided, do not constitute any supervisory responsibilities.

NOTICE

The information given in this publication is based on present state of our knowledge. Any recommendations and suggestions are made without guarantee since the conditions and procedures are beyond our control. Buyers and users should make their own assessment of our product under their own conditions and for their own requirements.

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