

# E.M.GROUT-500

## **EXPANDER ADMIXTURE FOR CONCRETE / MORTAR**

#### DESCRIPTION

E.M.GROUT-500 is an advanced concrete and mortar admixture. It provides a controlled expansion when added to concrete or mortar. E.M.GROUT-500 is used where conjunction is required.

It meets the requirements of the following standards: ASTM C827 / C827 M, ASTM C806, ASTM C940

## ADVANTAGES

- Provides a controlled expansion
- Prevents shrinkage and cracking
- Eliminates bleeding
- Accelerates time to obtain initial and final strength
- It can be used with all types of Portland cement (exception type 5)
- Increases the compressive strength of concrete and mortar
- The product is free from iron particles and hence any possibility of development of points and blotches of rust is eliminated

#### APPLICATION

- The mortar used in steel structures and heavy machinery
- Injections for dams and tunnels
- Repairing of concrete structures where any shrinkage of concrete or mortar is to be • avoided

#### DOSAGE

Depending on demand expansion considering the  $C_3S$  and  $C_3A$  in the cement and ambient temperature, a dosage of between 0.2 and 0.8 percent by weight of cement for mortar and between 1.0 and 3.0 percent by weight of cement for concrete is recommended.

For produce low expansion mortar, optimum dosage of E.M.GROUT-500 can be determined by trials in the site.

## DIRECTION OF USE

E.M.GROUT-500 should be added to the concrete or mortar mixture (About 3 to 5 minutes is necessary to combine).

Ready-mix concrete or mortar should be applied at least 15 to 20 minutes after mixing. Note: curing is necessary after placing concrete.

## PHYSICAL AND CHEMICAL PROPERTIES

Physical state: Powder Color: Gray Specific gravity: 0.62+ 0.05 g/cm<sup>3</sup> Chloride content: Nil











Institute



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Iran Standard's Mark Iranian Tunneling Association Membership

ISO 9001:2008 Holders Association TÜV NORD Iran PJS Membership

Iranian Concrete National Accreditation Center of Iran Membership ISO / IEC 17025

Ministry of Industry, Mine and Trade R & D Certificate

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#### **STORAGE**

Shelf life: 1 year in the original package Storage condition: should be protected from direct sunlight. Keep pail in the temperature range between +10°C and +30°C Packing: 10 kg bag

Note: Please contact our engineering office in case of simultaneously use of more than one admixture.

Use simultaneously E.M.GROUT-500 with pozzolanic materials and Portland cement type 5 has not achieved correct results

#### **HEALTH AND SAFETY**

This product does not contain any substances hazardous to human health and the environment. However, it should not be swallowed or allowed to contact with skin and eyes. In case of contact with eyes rinse immediately with plenty of water. For further information refer to the material safety data sheet.

E.M.GROUT-500 is not flammable. MSDS is available at ABADGARAN website.

#### **TECHNICAL SERVICE**

The ABADGARAN INTERNATIONAL GROUP Technical Department is available to assist you in the correct use of our products and its resources are at your disposal entirely without obligation.













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