



IKSA Construction Chemicals & Concrete Additives

Mebusevleri İller Sk. 23/5
Tandoğan 06580 - ANKARA
Tel : (+90 312) 212 99 90 PBX)
Fax : (+90 312) 212 99 89

POLYCAR-100

SUPERPLASTICIZER FOR CONCRETE & HIGH DEGREE WATER REDUCER

DESCRIPTION

POLYCAR-150 is a high degree water reducer and superplasticizer additive for concrete. It increases the early strength of the concrete. It is suitable for shotcrete applications.

STANDARTS

POLYCAR-100 conforms to ASTM C 494 Type F and EN 934-2 Table:3.1 and 3.2 High Range Water Reducing/Super Plasticizing admixture. POLYCAR-100 is signed with the CE marking according to the technical requirements of the European Standard EN934-2:2001+A2:2005. Certification No: 1783-CPD-001

APPLICATION

POLYCAR-100 is used widely for the applications at which:

- The section to be placed without voids and neat outer surface is important.
- high water reduction is necessary for shotcrete applications.
- High strength is required, early from release is desired, and higher pumpability is preferred, as prestressed concrete.
- Requirement of gauging water can be reduced by 20% with correct mix design and monitoring, minimizing segregation risk in fresh concrete. With respect to reduction of the gauging water, increases the compressive strength by minimum 40% in one day and by 15% in 28 days.
- When mixed into ready mix concrete perfect workability is obtained and causes reduction of the requirement for vibration in compaction.

ADVANTAGES:

- Regarding the dosage used requirement of gauging water can be reduced by 12%-25%.
- Regarding the dosage used minimizes the slump losses.
- Increases the workability time without the risk of segregation.
- Gauging water requirement can be reduced without affecting the workability.
- Respect to the reduction of gauging water, increases the final strength.
- During setting of the concrete, increases the reaction rate of strength gain.
- Stops unnecessary air entrainment into the concrete in order to form homogeneous and compact concrete.

METHOD OF APPLICATION

Considering cement and aggregate properties and dosage, together with slump and strength increase required. Useful dosage is between 1 to 3% of cement by weight. The optimum dosage should be determined through the tests at jobsite. For shotcrete applications Polycar-100 is added at the ready mix plant.

PHYSICAL PROPERTIES

Type	: Polycarboxylate based.
Appearance	: Light brown colored liquid
Density (ca.)	: 1,03±0,02kg/L
pH	: 4,50 – 6,00
Na ₂ O equivalent	: ≤ 10% (EN 480-12)

PACKING

POLYCAR-100 is supplied in 30kg plastic, 200kg steel drums, 1100kg cubitainers and bulk.

STORAGE

POLYCAR-100 has 1 year shelf life in sealed and undamaged containers. The storage is to be done in places protected against freezing. Very slow thawing is possible with less than 50°C never through direct flame.

SAFETY

POLYCAR-100 is a nontoxic material. No special precaution is required during handling. For detailed information MSDS is available.

Regarding the design, development, production and distribution of its products, IKSA is certified and applies the quality assurance system ISO 9001. In addition, IKSA Integrated Management System involves ISO 14001 and ISO 18001. Certificate Numbers: 12 300 0334 – 12 104 34115 TMS – 12 400 0023

The details for our products and their possible uses indicated above should be understood as advisory only, to the best of our knowledge. The details do not constitute any guarantee or legal commitment and must be verified for each individual application.