

Polycarboxylate Ether 50% Hyper-Plasticizer with Very High Efficiency

Description

Parsman Chemical[®] YASAN[®] 1070 is the latest generation of polycarboxylate raw material for producing concrete superplasticizers, with very high efficiency. This product generate according the requirements of Artificial Stone, Precast concrete and ready mix concrete plants with the specific advantage to have optimal performances.

Fields of Applications

- Normal and Self-Compacting Concrete (SCC)
- High Strength Concrete
- High Durability Concrete
- Ultra-High-Performance Concrete (UHPC)
- Low-Permeability Concrete

Advantages and characteristics

YASAN[®] 1070 is the latest generation of Polycarboxylate material that combines the following possible performances:

- **Strong reduction of mixing water with same workability** resulting in exceptional increase in mechanical strength, in the water resistance and to water dissolved chemical agents, in the resistance of penetration of carbon dioxide, and increases durability for all exposure conditions as required by Standard EN 206-1.
- **Very strong increase of the workability with same water/cement ratio**, allowing production of self-compacting concretes.
- **Reduction of both water and cement amount** (especially for concretes with high dosages of cement) with the same consistency and, consequently more cost effective. Reduction in the drying shrinkage, decrease in the heat of hydration and of temperatures in the mass of the casted concrete, and possible increase of the stiffness of structures.
- The special reactivity of the Polycarboxylate allows effective adapted formulation according to the reactivity of special cements used with consequently technological and economic benefits.
- To obtain concrete $\geq$ C85

Technical Data

Effective component	Polycarboxylate Ether (PCE)
Physical form	Liquid
Color	Yellow to Amber
Density	1.10 $\pm$ 0.02 g/cm ³ @ 20 °C
pH	3-5 @ 20 °C
Freezing point	Approx. 0 °C
Total chloride content	< 0.1 %
Alkali content	Approx. 1 %
Recommended dosage	0.10% - 0.8 % by weight of cement
Standards	ASTM C494 EN 480 ISIRI 2930-2 Tables 3-1 and 3-2

Application Notes

YASAN[®] 1070 is used for formulated of Superplasticizers and plasticizers that is used for production of Ready-mixed concrete, Artificial Stone and Precast concrete elements in the plant during the all seasons, Maintaining proper concrete mix flowability (or consistency class). It complies with mix designs for every consistency class, class of exposure, durability class as specified in the European standard EN 206 with outstanding technological, economic advantages, quality and durability.

For maximum effectiveness do not use dry aggregates but only aggregates already saturated with water. Otherwise premix for some time the dry aggregates with a part of mixing water. Add the additive in the plant mixer at the same time as the mixing water.

This product is compatible with following additives and treatments:

- Reactive micro-silica (silica fume)
- Retarding agents: Parsman Chemical[®] R-200, for retardation of the setting (hot climates and long-

distance concrete transportation)

- Slump retaining PCE: Parsman Chemical® ARSAN® 075s
- Accelerating agents: Parsman Chemical® AX-104, for reducing setting time of concrete (cold climates)
- Expansive agents
- Air entraining agents: Parsman Chemical® AE-200
- Agents for the reduction of hygroscopic and autogenous shrinkage
- Curing compound for exposed concretes
- Universal demolding oil

Packaging

YASAN® 1070 is supplied in 20 and 220 litre, non-returnable drums.

Alternatively, 1,000 litre IBCs and bulk deliveries can be arranged.

Storage

The product can be kept for 1 year if stored in a dry area, in original and closed packaging, at

temperatures between +5°C and +35°C.

Health and Safety

Before using the product please read carefully the Material Safety Data Sheet (MSDS) or read the Safety Instructions on the packaging.

Technical Service

The Technical Service Department of Parsman chemical is available to assist you in the correct and best use of our products. These resources and advice are at your disposal entirely without obligation.

Please contact:

Parsman Chemical department

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