

Poly44

GEO CHEMICAL POLY 44

Description

High Range Water Reducer/ Plasticizer Concrete Admixtures

Poly 44 admixture are Super plasticizers formulated that are based on naphthalene Sulphonate formaldehyde condensates sodium is a highly effective dual action liquid super plasticizer the production of free flowing concrete or as a substantial water reducing agent for promoting high early and ultimate strength. This product from selected polymers specially designed to enable the water content of the concrete perform more effectively with higher developed early strength, this effect can be used to improve workability, to increase ultimate strengths or to facilitate a reduction in the cement content while sustaining mix properties .

Application

Poly 44 admixture is used in condition such as:

- # Pre cast concrete elements.
- # Pre stressed concrete.
- # High strength concrete.
- # Low water cement ratios.
- # To produce high quality concrete of improved durability and water tightness.
- # In slab and foundation, curtain walls, girders, and columns, Piers, in bridges, in architectural structures and in RCC concretes.
- # To concrete elements with thin and dense reinforcements.
- # For application where fast stripping needed.

Advantage

- # Workability is greatly improved. Increased place ability in slender components with packed reinforcement.
- # Decreases the amount of vibration required.
- # Normal set without retardation.
- # Significantly reduces risk of segregation.
- # High reduction in water without loss of workability.
- # Improved early and long term strengths.
- # Gives smooth surface after leveling.
- # It is more suitable to be used in reinforced concrete constructions.
- # Increases the resistance of the concrete against water and frost.

Standards

- # BS EN 934-2 Chart 3.1 and 3.2 : High Range Water Reducer/ Superplasticizer Concrete Admixtures.
- # BS EN 934-2 Chart 11.1 and 11.2 : Set Retarder /High Range Water Reducer/ super plasticizer Concrete Admixtures.

Package

Poly 44 is available in 200 liter barrel, 1000 liter bulks supply, tanker.

Dosage

Poly 44 admixture are depending on performance expected from the concrete, it is between (%1- 2) of the binding material (cement, micro silica, fly ash) amount.

If dosed over %2 in winter months, set retarding may be observed, in order to find optimum admixture dosage, it is recommended to make experimental and aggregate used.

When it is required, GEO CHEMICAL Construction Chemicals Technical Support Unit should be consulted.

Compatibility

Poly 44 admixture is compatible with types of Portland Cement (OPC), but recommended to have a trial before use it and decide a dosage. other GEO CHEMICAL admixtures used in the same concrete mix, if more than one type of admixture will be used in the concrete mix, they must be dispensed to the concrete separately.

Cleaning

Poly 44 admixture spillage should be collected by a suitable absorbent such as vermiculite and transferred by suitable container, and should not be allowed to enter sewers or open bodies of water, dispose of in accordance with local environmental regulations.

Technical Properties

Color	Light Brown Liquid
Freezing	-15 c
Chemical content	Polynaphthalene Sulphonate
pH	5-8
Density	1.06 - 1.1
Chloride content	< % 0.2
Alkali	< 5

Storing Condition

It is store in dry condition, Poly 44 series has minimum shelf life of 12 months from date of manufacture if stored properly in its original unopened packing.

If the additive is frosted under +5 c , it should be thawed by waiting at ambient temperature without using direct heating and mixed until it becomes homogeneous.

Compressed air should not be used during this operation.

Security Information

All technical information stated out in this product data sheet are based on laboratory experiments, Users can get physical, toxicological, geological information and recommendations related to carrying, storing and safe disposal of chemical products from (MSDS) Material Safety Data Sheet of product.

Poly 44 should not come into contact with skin and eyes that is classified as hazardous material.

In case of contact with eyes wash immediately with plenty of water and seek medical advice promptly.

Fire

Poly 44 series is nonflammable.

