

SUPERMAT-21

Concrete super-plasticizer

Technical Features

Form:	Light brown liquid
Dosage:	0.3 - 0.5% of cement quantity
Water reduction:	up to 25%
Bulk density:	1.1 L. /dm ³

Properties

- Liquid super-plasticizer for concrete,
- Enables water reduction in concrete mixtures up to 25%,
- Improves the compactness,
- Increases the initial and final compressive and flexural strengths,
- Improves the concrete workability without water addition,
- Enables better final surface processing,
- Decreases the shrinkage which appears during cement hydration,
- Free of chlorides.

Usage

It is used for concrete with high initial and final compressive strengths and cast concretes with W/C ratio lower than 0.4, thickly reinforced concrete section, pumped concretes, abrasion resistant concrete (industrial floors), waterproof and frost-resistant concretes, concretes with increased resistance to aggressive mediums. In addition, it can be used for concretes with increased resistance to atmospheric influences, concretes for prefabricated constructions when rapid formwork releases is required. It is excellently suitable when processing grouts.

Dosage

The optimal dosage of **SUPERMAT-21** is 0.3-0.5% by weight in relation to cement mass and it depends on the necessary reduction, cement and aggregate quality and the type of mixer. The dosage is performed either manually or with machine, during preparation of concrete mixture. The best way is to add **SUPERMAT-21** in water. If the placing time at normal conditions is longer than 30 minutes after concrete mixing, the dosage should be performed immediately before placing of concrete. The required mixing time of concrete mixture by adding of **SUPERMAT-21** should be at least 2-3 minutes. At normal conditions, concrete prepared with **SUPERMAT-21** should be placed in at latest 30-40 minutes. If the placing time is exceeded, then the super-plasticizer action stops. The previous characteristics of the concrete mixture are reanimated with re-dosage of this additive. The overdose has no harmful consequences on the concrete.

Storage

In original wrapping, in dry place, at temperature of +5 to +45 °C. The storage duration is 12 month.

Packaging

<u>Liquid:</u>	
▪ Plastic can:	5 L. / 10 L. / 20 L.
▪ Metal barrels:	240 L.
▪ Plastic Containers:	1000 L.