

PLAST TB101

Super Plasticizer With Slump Retaining Effect



General Properties:

- **PLAST TB101** is a high range water reducing & retarding admixture for concrete mix, which is manufactured to conform to the specifications of ASTM C-494, type A, B D, & G.

Application:

1. When added to the concrete mix, **PLAST TB101** shows a strong plasticizer effect and improves the properties of fresh & hardened concrete considerably. This plasticizing effect can be used to increase the workability of the fresh concrete and to reduce the w/c ratio to improve the early and ultimate strength of hardened reduced cement content. This is achieved in order to economize the concrete mix.
2. Depending on the dose, **PLAST TB101** delays the initial and final setting of the concrete thus resulting in a better slump retention. This particular value is achieved even at high ambient and high fresh concrete temperature and for large distance transporting concrete as well as concrete pumping.

Setting Time: (See Table)

- Initial and final setting times of the concrete will be prolonged depending on the dose rate as well as concrete ambient temperature, humidity, type of cement, etc.
- In general, the first setting will be delayed for about 2-3 hours at normal dose rates.

Slump Retention:

- **PLAST TB101** considerably improves slump retention even at high temperature.

Compatibility:

- **PLAST TB101:** are generally compatible with all other types of concrete admixtures but it is recommended that **PLAST TB101** shall be added to the concrete mix separately.
- **PLAST TB101:** can be used with all types of cements including cements containing flash or granulated blast furnace slag. (In any case proper suitability field testes should be carried out).

Dose:

- In general, dose of **PLAST TB101** ranges between 0.3 and 1.2% of cement weight.
- At high ambient temperature, the dosage can be increased up to 1.8 % of cement.
- **PLAST TB101** can be added to the mixing water; however, the best effect will be achieved when added to the concrete mix separately after adding the mixing water. To determine the right dose proper laboratory or site trials should be performed.

The table shows Slump and compressive strength of concrete with PLAST TB101
 (Cement concrete: 350 kg/m³ - PZ 35F (DIN 1164). Corresponding approx. to (ASTM C 150 type 1)
 Fresh concrete temperature: 35°C, Storage temperature during first day = 35°C

W/C Ratio	Dosage of PLAST TB101 % Wt of cement	Slump (cm)	Compressive strength (N/mm ²)	
			7 days	28 days
0.6	---	8	20.4	29.8
	0.3	14	22.3	31.3
	0.6	21	23.1	32.2
	0.9	Collapsed	23.2	32.9
0.4	---	1	37.2	49.8
	0.6	6	39.6	51.9
	1.2	15	41.2	53.1
	1.8	Collapsed	42.0	55.1

Technical Data:

- Appearance** : Dark – brown solution.
- Density** : 1.18 gm/cm³ at 20°C.
- Ph Value** : approximate 8 -11.
- Shelf Life** : 12 months in closed container away from sunlight, heat and humidity.

Environment:

- Boots, rubber gloves, dust masks, and safety goggles.
- Refer to MATERIAL SAFETY DATA SHEETS (MSDS).

For more information please contact our technical department

Head Office: 21 Takseem El Awkaf – EL Sawah Sq. Cairo – Egypt
 Tel: 002 / 02 24535678 - 24535679 Fax: 002 / 02 24538986
 Web site: www.yasmomisr.com E-mail: yasmo@yasmomisr.com