

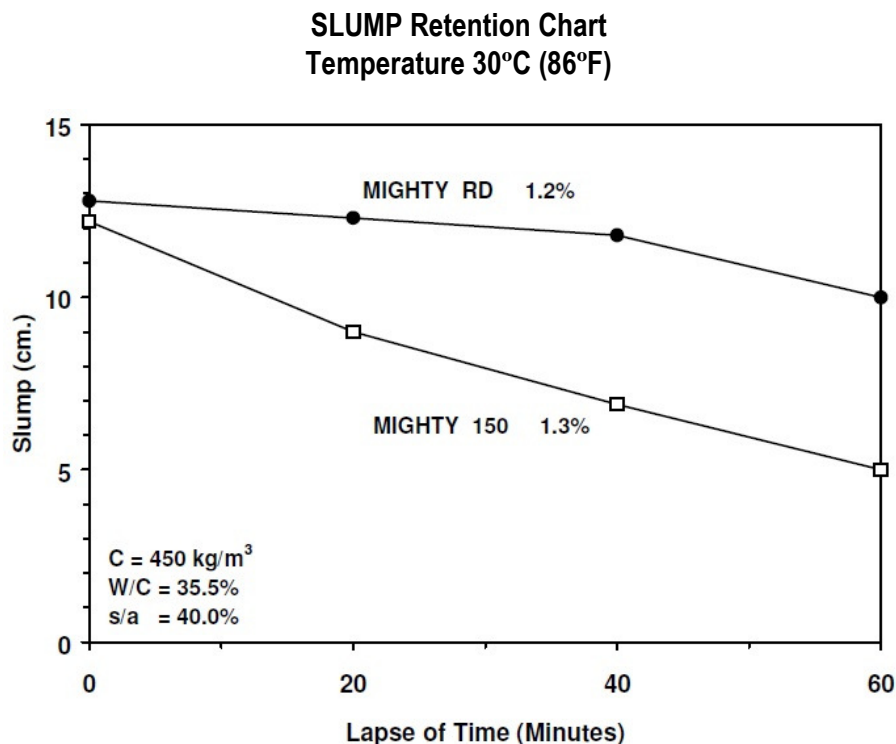
TECHNICAL INFORMATION

MIGHTY RD (Slump Retentive Type Superplasticizer)

MIGHTY RD can help retain the slump of concrete mixes of high cement factor which are normally used for precast, prestressed concrete products. This retentive characteristic is available without sacrificing the excellent water reducing effect of its world-famous pioneer superplasticizers: MIGHTY 150 normal-set type superplasticizer.

Characteristics

- 1) High rate of water reducing performance due to excellent dispersing ability.
- 2) Retention of slump of concrete mixes during the varying waiting time prior to placing, thereby allowing longer and more flexible working time schedule.



- 3) Improvement of pump ability and reduced discharge pressure.
- 4) Contains no chlorides, thus does not contribute to corrosion on steel reinforcement.

General Properties

Chemical Composition	:	High Molecular Weight Sulfoaryl Alkylene
Appearance	:	Dark Brown Liquid
Specific Gravity at 20°C	:	1.18 ~ 1.22
pH (5% solution)	:	8.0 ~ 10.0
Color (Gardner)	:	12 max.
Viscosity, at 20°C (cps.)	:	200 max.

Suggested Uses

The dosage rates of MIGHTY RD depend on the materials, use conditions and the types of end-products and so forth, but generally, we suggest the dosage rates between 0.6 % to 2.4 % by weight of cement used. It is recommended that the users determine the optimum dosage rate for their own objectives and under their conditions. Complies with ASTM C494 type G and Type D

<u>Target Compressive Strength</u> (kg/cm ²)	<u>Dosage Rate</u>
300 - 600	0.6 - 1.2
600 - 800	1.2 - 1.8
800 - 1,000	1.8 - 2.4

Characteristics of the Hardened Concrete

Material Used

Cement	:	Ordinary Portland Cement (Type I)
		Specific Gravity = 3.17
Sand	:	River Sand
		Specific Gravity = 2.58
		Fineness Modulus = 2.90
Gravel	:	Crushed Rock
		Specific Gravity = 2.62
		Fineness Modulus = 6.76
		Maximum Size = 20 mm.

Mix Formulations

	Control (Plain)	MIGHTY RD-T
Slump Range, cm.	12 - 1	12 - 1
Air Content, %	2 max	2 max
Water / Cement Ratio, %	44.6	37.0
Unit Weight, kg/m		
Cement	450	450
Water	201	167
Sand	658	692
Gravel	1,001	1,056
Admixture Dosage (% on cement wt.)	0	1.2

Compressive Strength, Standard Curing

	Control (Plain)	MIGHTY RD-T
Slump, cm.	11.0	11.8
Air Content, %	1.5	1.8
Compressive Strength, kg/cm		
3 days	297	379
7 days	361	513
28 days	479	605

Precautionary Instructions

As it is normal with chemical admixtures for concrete, the performance of MIGHTY RD may vary depending on the materials. Therefore, we suggest that the users run a prior testing with the cement and aggregates available to them to determine the applicable rates of dosage for their own mix formulations.

Packing 244 kgs net in chemicals drum