

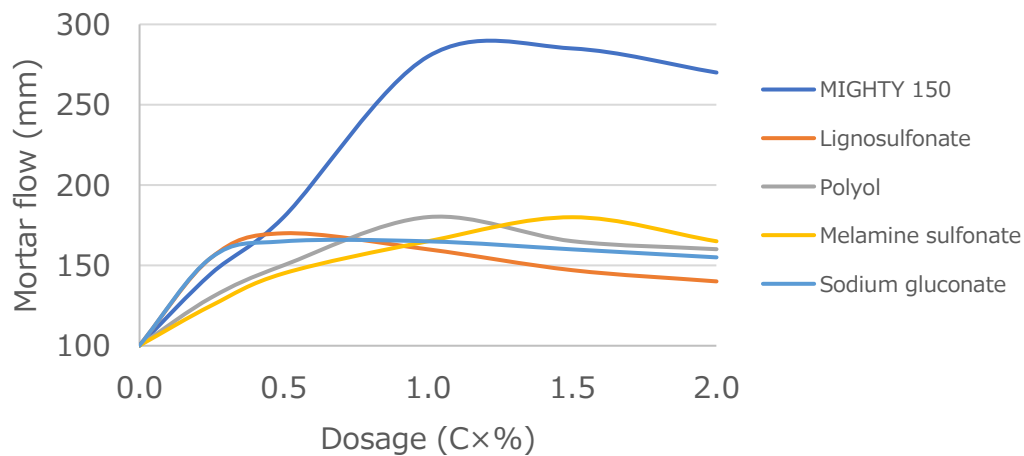
High Performance Water-reducer for Concrete

MIGHTY 150, with its main ingredient of sulfonated naphthalene formaldehyde salt condensate, is a high-performance water-reducer with exceptional water reducing performance. Through its cement-dispersing properties, it facilitates effective dispersion of cement particles even at low water-cement ratios, allowing for increased cement paste fluidity. A non-air-entraining high-performance water-reducer, MIGHTY 150 is best suited for high-strength precast concrete applications.

Features

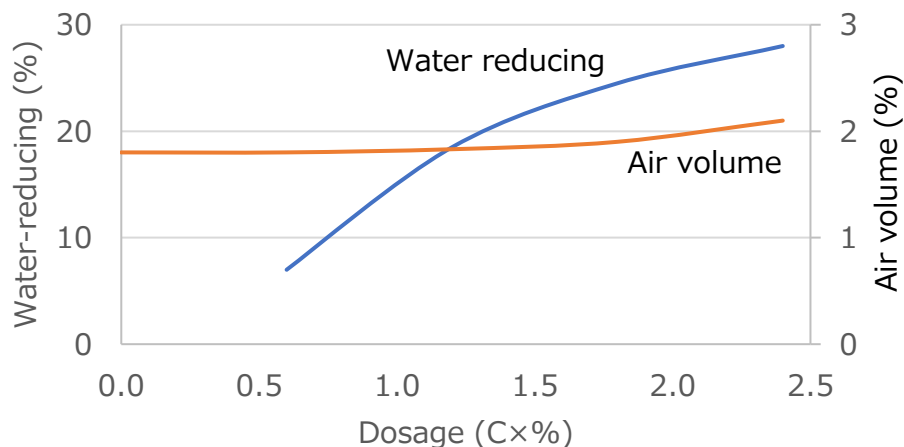
- 1) Excellent cement particle dispersion performance

Mortar flow values for different water-reducer types (W/C=25%)



- 2) Low foaming, non-air-entraining, high water-reducing capabilities

Relationship between water reducing performance and air-entraining volume



- 3) MIGHTY 150 does not contain rebar-corroding salts.
- 4) Negligible hardening retardation properties makes it highly suitable for concrete precast production.
- 5) MIGHTY 150 does not break down even at high temperature curing (autoclave etc.).
- 6) Low toxicity ensures that it can be handled safely.

Usage Method and Dosage Amount

- 1) Liquid MIGHTY 150 is easily dissolved in water.
- 2) Mix well with water and dissolve it uniformly as far as possible when dosing.
- 3) Dosage amounts should be adjusted to the desired target strengths as per the table below.

Compressive strength (N/mm ²)	MIGHTY 150 dosage amount (C×%)
40~60	0.6~1.0
60~80	1.0~1.8
80~100	1.5~2.4
100~	2.4~3.5

Concrete Test Results

Cement : Ordinary Portland Cement
 Fine agg. : KINOKAWA river sand
 Coarse agg. : YURA crushed stone
 Curing conditions : Standard curing

MIGHTY 150 dosage amount (C×%)	W/C (%)	S/a (%)	Unit water amount (kg/m ³)	Unit cement amount (kg/m ³)	Slump (cm)	Compressive strength (N/mm ²)	
						7日	28日
0.0	42.5	38.6	170	400	9.5	33.5	49.8
0.6	40.0	36.7	160		8.0	45.3	61.4
1.2	37.3	38.5	149		9.2	50.9	68.6
1.8	34.3	39.6	137		9.6	61.9	72.0
2.4	31.5	40.5	126		9.8	64.6	76.5
0.0	37.0	34.0	185	500	8.8	46.4	62.9
0.6	35.0	33.5	175		7.5	55.1	73.2
1.2	32.0	34.5	160		7.0	70.1	81.2
1.8	29.6	35.6	148		9.3	71.0	82.5
2.4	27.4	36.6	137		9.5	71.7	86.1
0.0	33.3	28.9	200	600	7.8	59.0	66.7
0.6	31.7	27.9	190		7.2	65.5	74.2
1.2	29.2	25.7	175		7.2	72.8	83.6
1.8	27.2	31.0	163		8.8	75.5	85.4
2.4	25.3	32.2	152		7.1	77.0	90.2

Properties

Composition : Sulfonated naphthalene formaldehyde salt condensate
 Appearance : Dark brown liquid
 pH (5% solution@20°C) : 8.0~10.0
 Density (g/cm³@20°C) : 1.190~1.210

*Substances harmful/corrosive to rebar are not incorporated.

Packaging

- 20kg can
- 240kg drum
- Lorry (loose)

The information and recommendations in this publication are to the best of our knowledge reliable. However, nothing herein is to be construed as a warranty or representation. Users should make their own tests to determine the applicability of such information or the suitability of any products for their own particular purpose. For more enquiries, please contact the following.

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