

DENKA BEFORM

Cementitious Quick Hardening Additive

Description

DENKA BEFORM is a quick-hardening cement admixture developed using DENKA's long-established cutting-edge technology in cementitious products.

Features

- Handling time can be adjusted to between 20 minutes and 2 hours by using general setting modifiers such as tartaric acid or dedicated setting modifier DENKA SETTER D-300
- Excellent initial strength (10-30MPa can be obtained in 6 hours)
- Excellent crack resistance
- Reduced self-shrinkage and drying shrinkage due to expansion characteristics

Applications

- Quick-hardening grout
- Self-leveling material
- Quick-hardening repairing material
- Decorative mortar
- Instant demoulding of small products

Packaging and General Information

- Packaging: 20kg bags
- Appearance: Greyish-white powder
- Specific weight: 2.92
- Blaine specific surface area: 6000cm²/g
- Additive amount: 15~20% by cement weight

Physical Properties of Mortar

General properties (typical values)

- Quick hardening additive (QHA): DENKA BEFORM, other CAC (Calcium aluminate cement)
- Retarding agent: DENKA SETTER D-300 for BEFORM, Tartaric acid for CAC
- Sand: ISO sand
- Water: tap water
- Base mix proportion; Binder/Sand = 1.0/1.5, Water/Binder = 0.30
- Length change; uniaxial confined method, cured in the water at 20°C after 1 day

OPC	Binder		Retarding agent (QHAX%)	Flow with 25 drops (mm)	Handling time(min)	Compressive strength (MPa)		
	Product	Ratio				3 hours	6 hours	1 day
100	—	—	—	153	300	—	—	32.0
90	BEFORM	10	0.26 ¹	209	55	7.1	15.4	35.9
85		15	0.26 ¹	212	56	11.4	24.4	45.4
75		25	0.28 ¹	215	68	16.3	37.5	73.2
80	CAC	20	0.11 ²	187	29	6.8	8.3	11.8
20		80	0.27 ²	162	30	5.1	18.4	55.2
10		90	0.13 ²	168	30	19.6	43.5	59.5

¹DENKA SETTER D-300

²Tartaric acid

Handling Precautions

- Refer to the Safety Data Sheet (SDS) before use.
- Wear protective gear (goggles, mask, gloves, and rubber boots) while handling the product. Do not dispose of the product in drains.
- Once opened, the product should be used up completely. Otherwise, reseal for storage.
- The product should be stored in a dry area, indoors, and out of direct sunlight.
- For further information, please contact DENKA.

Limitation of Liability

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- DENKA reserves the right to change the Product Information from time to time at its discretion and without notice.

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