

DENKA SUBSHOT MORTAR-N

Premixed Spray Mortar for Wet / Dry Process

Description

DENKA SUBSHOT MORTAR-N is a pre-mixed sprayed mortar with dust-suppression functionality; effectively controlling dust emissions and improving construction work environment. **DENKA SUBSHOT MORTAR-N** is to be used in conjunction with a liquid accelerator (e.g. **DENKA NATMIC AF-S**) and requires a system equipped with mixing and pumping equipment; preferably with separate inlets for water and liquid accelerator.

Features

- Fast setting, early strength
- Minimized dust generation and rebound
- Excellent compressive strength, bond strength and flexural strength
- Excellent resistance to inflow
- Compact system design
- Ease of operation; versatility with different equipment
- Suitable for both wet and dry shotcreting

Applications

- Stabilizing and strengthening in mining
- Tunnel repair
- Support for small cross-section tunnels
- Slope stabilization
- Reinforcement for unconsolidated ground
- Ground support after TBM excavation

Packaging

- **DENKA SUBSHOT MORTAR-N** : 25kg bag
- **DENKA NATMIC AF-S** : 260 kg drum

Shelf Life

- 6 months from production date
- Determine the production date by reference to the lot number. A lot number of "1AXXX" corresponds to production in Jan 2001; "2BXXX" to Feb 2002 and so on.

Physical Properties

Initial setting (min)	Compressive strength (N/mm ²)	
	12h	Day 28
< 10mins	10 MPa	35 MPa

Mixing Procedures

Dry Process

Pump mortar to nozzle and introduce both water and **DENKA NATMIC AF-S** through separate inlets at the nozzle for mixing.

Wet Process

Premix the powder and water, then pump the mixture to the nozzle, introduce NATMIC AF-S at nozzle

Mix Design for Dry Process

DENKA SUBSHOT MORTAR-N	: 25 kg
Water	: 12% ~ 14% (3 ~ 3.50 kg)
DENKA NATMIC AF-S	: 2% ~ 4% (0.5kg ~ 1.0kg)

Spray Placement

Spray continuously and uniformly to the required thickness. Multiple layer spraying is not recommended.

Yield & Coverage

- 12.8 litre per bag (depending on water addition)
 - 0.25m² per bag at 50mm thickness
- Figures above are arbitrary. Actual coverage will depend on site and surface conditions.*

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

The information contained in this brochure provides general advice for potential customers of DENKA about the basic properties and characteristics of various DENKA products (hereafter referred to as "the Product Information"). DENKA makes no warranty or representation as to the entire accuracy or completeness of the Product Information in this brochure. Nothing in this brochure will be deemed to create any express or implied warranty or obligation of DENKA with respect to the Product Information or its use, including, but not limited to, any warranty of merchantability, fitness for a particular purpose, or infringement of any intellectual property rights. Each user of the Product Information and DENKA products assumes their own responsibility to properly determine the manner and suitability of use of the Product Information and DENKA products in its own operations. The user should exercise proper care in considering the Material Safety Data Sheet, Product Information and any other technical information provided by DENKA, including descriptions of the conditions of use, warnings, and other cautionary instructions. DENKA reserves the right to change the Product Information from time to time at its discretion and without notice.

Denka
<http://www.denka.co.jp/eng/>

Denka Co. Ltd.

Special Cement Additives Department
TEL: +81-3-3507-5465 FAX: +81-3-3507-5085

-China-

**DENKA INFRASTRUCTURE
TECHNOLOGIES SHANGHAI**
ROOM 2807, NEW HONGQIAO
CENTER BLDG
NO.83 LOUSHANGUAN RD,
CHANG NING AREA, SHANGHAI CHINA
TEL: +86-21-6236-5510
FAX: +86-21-6236-5505

-Asia-

**DENKA INFRASTRUCTURE
TECHNOLOGIES PTE LTD**
4 SHENTON WAY #29-02 SGX
CENTRE 2 SINGAPORE 068807
TEL: +65-6216-0580
FAX: +65-6224-3840

-Europe-

DENKA CHEMICALS GMBH
WEHRHAHN-CENTER, CANTADOR STR.3,
DUSSELDORF, GERMANY
TEL: +49-211-130990
FAX: +49-211-329942

5J01JP