

DENKA FINE CSA-N

Fast Demoulding Additives for Concrete Production

Description

DENKA FINE CSA-N is a fast demoulding additive for concrete production.

Features

- Enhanced strength development
- Shorter production cycle; reducing costs for steel mould preparation
- Reduced drying shrinkage and cracking; enhancing concrete durability

Applications

- Fast removal of steel moulds in concrete production (segments, box culverts)
- Ecological concrete containing granulated blast furnace slag, fly ash



Box culvert



Granulated blast furnace slag

Packaging

- 20kg bags

Physical Properties

- Chemical formula: $\text{CaO} \cdot \text{Al}_2\text{O}_3 \cdot \text{SO}_3$
- Density: 2.89 g/cm^3
- Appearance: Gray powder

Standard Mix Proportions, Strength Development Data (Typical Values)

| W/C ¹ | S/A ² | Unit content (kg/m ³) | | | | | SP ⁴ (Cementx%) |
|------------------|------------------|-----------------------------------|---------------------|---------------|------|--------|-------------------------------|
| | | Water | Cement ³ | FINE CSA-N | Sand | Gravel | |
| 0.35 | 34 | 140 | 400 | 0 | 635 | 1242 | 1.2 |
| 0.35 | 34 | 140 | 380 | 20 | 635 | 1242 | 1.4 |

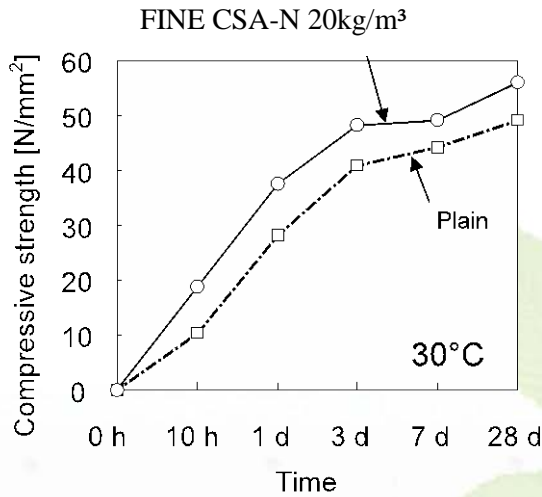
¹Water to cement ratio

²Sand to aggregate (sand and gravel) ratio

³Ordinary Portland cement

⁴Naphthalene system-based super plasticizer.

Concrete should be mixed and cured at temperatures below 30°C.



| Age | Compressive strength (MPa) | |
|-----|----------------------------|------------|
| | Plain | FINE CSA-N |
| 10h | 10.3 | 18.8 |
| 1d | 28.0 | 37.5 |
| 3d | 40.8 | 48.1 |
| 7d | 44.1 | 49.0 |
| 28d | 49.0 | 55.9 |

Handling Precautions

- Refer to the Safety Data Sheet (SDS) before use.
- Optimize the dosage and dosing position of the product.
- Wear protective gear (e.g., goggles, mask, gloves, and rubber boots) while handling the product.
- Store the product in an area with low humidity as far as possible.
- Once opened, the product should be used up completely. Otherwise, reseal for storage.
- For further information, please contact DENKA.

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