

DENKA POWER CSA TYPE-S

Shrinkage-Reducing and Compensating Additive

Description

DENKA POWER CSA TYPE-S is a shrinkage-reducing, high-performance expansive additive used in concrete and mortar.

Features

- Shrinkage compensation (reduces cracking caused by drying shrinkage)
- Increases water-tightness
- Cost-effective

Applications

- Dry mix mortar
- Ready-mixed concrete

Packaging

- 20kg paper bags
- 1000kg bulk bags

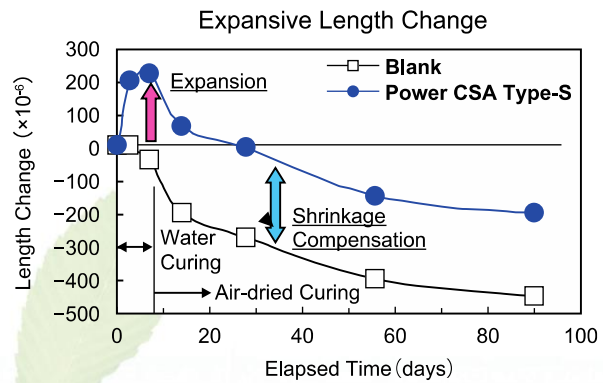
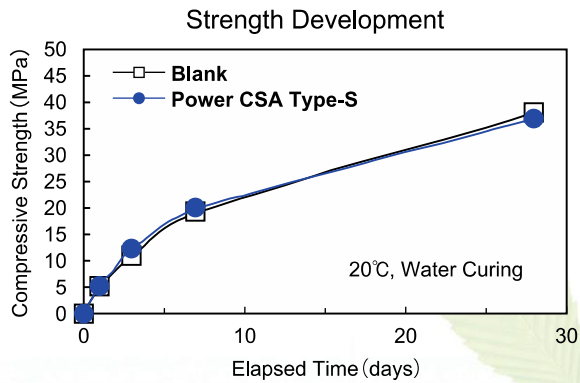
Shelf Life

- 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.

Chemical Composition (Typical Values)

SiO ₂ (%)	Fe ₂ O ₃ (%)	Al ₂ O ₃ (%)	CaO (%)	SO ₃ (%)	Total (%)	f-CaO (%)
1.0	0.8	7.2	70.6	18.5	98.1	49.8

The above may vary depending on equipment, temperature, mixing methods, application methods, test methods, actual site conditions and curing conditions.



Concrete Mix Proportion

Ordinary Portland Cement	: 320kg/m ³
Power CSA Type-S	: 20kg/m ³
W/(cement+ P-CSA)	: 55.0%
Sand-Aggregate ratio	: 45.5%

Handling Precautions

- Refer to the Safety Data Sheet (SDS) before use.
- Use a stainless steel or iron agitating blade. Do not use an aluminum blade because hydrogen gas evolution can occur while mixing the mortar; resulting in explosions.
- Mix grout with the specified quantity of water. Using quantities outside the specified range may affect the performance of the non-shrink mortar.
- Use clean water free from oils, salts, or organic compounds.
- Before beginning injection work, optimize water quantity in mixing trials and remove oily residues, laitance, and mud from the surface of structures.
- 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.
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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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