

Mapecube 4

Strength Enhancer for Use with Supplemental Cementitious Material

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapecube 4 is a chloride-free, strength-enhancing liquid admixture that, by optimizing the hydration of cement phases, increases the strength of concrete and mortar at all ages. *Mapecube 4* is particularly suitable for use with supplementary cementitious materials, such as fly ash, silica fume, slag-cement and other natural pozzolans, and also works well when used with low-alkali cement types. *Mapecube 4* meets or exceeds the requirements of ASTM C494 as a Type S admixture.

WHERE TO USE

- Precast concrete
- Ready-mix concrete
- Slabs on grade
- Paving

MIXING/PRECAUTIONS

To achieve the best results, add *Mapecube 4* to concrete containing a polyether-carboxylate-based superplasticizer. Mix until a completely homogeneous mix is obtained (in 3 to 5 minutes). Mix the components with 80% of mixing water and then add the remaining water, if needed, to achieve the desired consistency of the mixture. In case of use in cold weather, it is advisable to take the following precautions:

- Ensure that concrete materials are maintained at a temperature higher than 41°F (5°C).
- Do not mix and place concrete when the temperature is lower than 14°F (-10°C). Follow ACI guidelines to protect concrete from freezing.
- Keep the water/cement ratio as low as possible.
- Insulate and protect concrete from cold temperatures (below 41°F or 5°C) and premature evaporation.

DOSAGE RATES

The recommended dosage range is 4 to 15 U.S. oz. per 100 lbs. (0.3 to 1 L per 100 kg) of the total cementitious content, according to application temperature and mechanical performances to be reached. Different dosages from those suggested must be previously tested through concrete trials, in addition to consulting MAPEI's Technical Services Department.

PACKAGING

Mapecube 4 is available in totes measuring 275 U.S. gals. (1 041 L).

STORAGE

Mapecube 4 can be stored for 6 months in a closed container. Protect it from frost and prolonged exposure to sunlight.

Technical Data

Appearance	Viscous liquid
Color	Brown
Density	1.16 (+/- 0.03)
pH according to ISO 4316	10 ± 0.5
Water-soluble chloride content per EN 480-10	< 0.1% (absent per EN 934-2)
Alkali content (Na ₂ O equivalent) per EN 480-12	< 6%
ASTM C494	Type S

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet for specific data related to health and safety as well as product handling.

For information on MAPEI's commitment to sustainability and transparency, as well as how MAPEI products may contribute to green building standards and certification systems, contact sustainability_USA@mapei.com (USA).

LEGAL NOTICE

The contents of this Technical Data Sheet ("TDS") may be copied into another project-related document, but the resulting document shall not supplement nor replace requirements per the TDS in effect at the time of the MAPEI product installation. For the most up-to-date TDS and warranty information, please visit our website at www.mapei.com. **ANY ALTERATIONS TO THE WORDING OR REQUIREMENTS CONTAINED IN OR DERIVED FROM THIS TDS SHALL VOID ALL RELATED MAPEI WARRANTIES.**

Before using, the user must determine the suitability of our products for the intended use, and the user alone assumes all risks and liability. **ANY CLAIM SHALL BE DEEMED WAIVED UNLESS MADE IN WRITING TO US WITHIN FIFTEEN (15) DAYS FROM DATE IT WAS, OR REASONABLY SHOULD HAVE BEEN, DISCOVERED.**

CONTACT INFORMATION

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Customer Service

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For the most current product data and BEST-BACKEDSM warranty information,
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