

Mapeshield CI 300

Corrosion-Inhibiting Admixture for Concrete

DESCRIPTION

Mapeshield™ CI 300 (formerly Polychem CI) is a liquid corrosion-inhibiting admixture based on calcium nitrite. *Mapeshield* CI 300 inhibits the onset of corrosion of reinforcing steel caused by chlorides typically present in de-icing materials. *Mapeshield* CI 300 meets or exceeds the requirement of ASTM C494, Type C; AASHTO M194, Type C; and ASTM C1582.

WHERE TO USE

Mapeshield CI 300 is recommended for use in ready-mixed, precast, pre-stressed or post-tensioned concrete and steel-reinforced concrete that will be exposed to chlorides. *Mapeshield* CI 300 is especially suitable for:

- Flatwork, paving, bridge decks, parking ramps/decks and in general concrete exposed to de-icing salts.
- Marine structures.

ADVANTAGES

- Decreased corrosion potential
- Increased concrete service life and durability
- Reduced setting time in cold weather

MIXING

Mapeshield CI 300 is typically added with the initial mix water or incorporated with the final mix water at the end of the batch sequence. *Mapeshield* CI 300 can also be jobsite-added as necessary.

COMPATIBILITY WITH OTHER PRODUCTS

Mapeshield CI 300 is compatible with most MAPEI admixtures. It is especially compatible with:

- Water-reducing admixtures manufactured by MAPEI.
- MAPEI-approved air-entraining admixtures.
- MAPEI-approved accelerators.
- MAPEI-approved retarders and slump extenders.
- MAPEI-approved viscosity-modifying admixtures.
- Silica fume.
- Fly ash and any other mineral addition.
- MAPEI-approved form-release agents.

DOSAGE RATES

Mapeshield CI 300 is recommended for use at a dosage rate of 2 to 5 U.S. gals. per cu. yd. (10 to 25 L per m³) of concrete, based on project specifications.

For set acceleration, *Mapeshield CI 300* is recommended for use at a dosage of 8 to 90 U.S. oz. per cwt (520 to 5 870 mL per 100 kg) of cementitious materials.

A water adjustment must be made to allow for the water inside *Mapeshield CI 300*: The mix water should be reduced by as much as the water added through the addition of *Mapeshield CI 300*. The adjustment factor is 7.2 lbs. of water per U.S. gal. (0.86 kg of water per L) of *Mapeshield CI 300*.

Dosage rates outside of the suggested ranges should be tested before using in production. Contact MAPEI's Technical Services Department for assistance.

PACKAGING

Mapeshield CI 300 is available by bulk delivery, in 55-U.S.-gal. (208-L) drums and 275-U.S.-gal. (1 041-L) totes.

STORAGE

Mapeshield CI 300 can be stored for 1 year in original sealed containers. Store at temperatures above 0°F (-18°C) to protect from freezing. If *Mapeshield CI 300* freezes, it can be thawed and reconstituted by mechanical agitation. Do not use pressurized air for agitation.

Technical Data

Consistency	Liquid
Color	Dark yellow
Density	10.6 lbs. per U.S. gal. (1.27 kg per L)
Primary function	Corrosion inhibitor
ASTM classification	C494, Type C; and ASTM C1582
AASHTO classification	M194, Type C

ADDITIONAL INFORMATION

Refer to the SDS 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).

WARNING

The test results shown in the TECHNICAL DATA table were obtained in compliance with test methods and curing cycles, if applicable, defined in the industry standards referenced on the Technical Data Sheet. Please note that the use of test procedures or methods other than those indicated in the table could lead to different values and that, in such cases, any liability of our company is excluded.

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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Flooring: 1-800-992-6273

Concrete and heavy construction: 1-888-365-0614

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1-800-361-9309

Customer Service

1-800-42-MAPEI (1-800-426-2734)

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For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
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