

Mapeplast 400 NC

Water-Reducing Admixture

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapeplast 400 NC (formerly Polychem 400 NC) is a normal-setting, multi-component, highly concentrated, water-reducing admixture conforming to ASTM C494 Type A and Type D. *Mapeplast 400 NC* will reduce the quantity of water required to produce concrete of a desired consistency, while providing greater economy for a given strength. It will increase strengths and improve workability and finishing characteristics. *Mapeplast 400 NC* does not contain calcium chloride, and is compatible with air-entrained and non-air-entrained mixes.

WHERE TO USE

Mapeplast 400 NC is used in all concrete where the following characteristics are required:

- Plastic concrete:
 - Reduced mix water requirement needed to produce a given slump or consistency (reduced water-cementitious ratio)
 - Improved workability
- Hardened concrete:
 - Increased compressive and flexural strength
 - Reduced cracking and shrinkage
 - Reduced permeability and increased water tightness
 - Increased freeze/thaw resistance
 - Superior surface appearance

APPLICATION PROCEDURE

Mapeplast 400 NC is typically added with the initial mixing water or incorporated with the final water at the end of the batch sequence. *Mapeplast 400 NC* can be added at the jobsite if required.

COMPATIBILITY WITH OTHER PRODUCTS

Mapeplast 400 NC is compatible with most MAPEI products for preparing quality concrete. It is especially compatible with:

- High-range water reducers from the MAPEI line.
- MAPEI-approved air-entraining admixtures.
- MAPEI-approved non-chloride and chloride accelerators.
- MAPEI-approved viscosity-modifying admixtures.
- Silica-fume-based powder additions.
- Fly ash and any other kind of cementitious addition.
- All types of Portland cements.
- MAPEI-approved form-release agents.

MAPEI's Technical Services Department is available to evaluate which admixture or admixture packages are most suitable for any specific need. Contact MAPEI's Technical Services Department for further advice.

For best results, each admixture must be dispensed separately into the concrete.

DOSAGE RATES

Mapeplast 400 NC is recommended for use at a dose of 3 to 5 U.S. oz. per 100 lbs. (195 to 325 mL per 100 kg) of cementitious material for Type A applications.

Mapeplast 400 NC is recommended for use at a dose of 4 to 6 U.S. oz. per 100 lbs. (260 to 392 mL per 100 kg) of cementitious material for Type D applications.

Mapeplast 400 NC may cause minimal retardation when used outside the recommended dosage rates. Contact MAPEI's Technical Services Department for recommended dosages and for assistance when using the product, if using this product outside the recommended dosage ranges or when combining with other admixtures.

PACKAGING

Mapeplast 400 NC is available by bulk delivery, in 55-U.S.-gal. (208-L) drums and 275-U.S.-gal. (1 041-L) totes.

STORAGE

Mapeplast 400 NC can be stored for 1 year in sealed containers.

Mapeplast 400 NC may freeze at temperatures below 23°F (-5°C). Although freezing does not harm *Mapeplast 400 NC*, precautions should be taken to protect it from freezing. If it should freeze, thaw and reconstitute it with mechanical agitation. Do not use pressurized air for agitation.

Technical Data

Consistency	Liquid
Color	Dark brown
Density	10.01 lbs. per U.S. gal. (1.20 kg per L)
Primary function	Increases workability and/or reduction of mixing water
ASTM C494 classification	Type A and Type D
AASHTO M194 classification	Type A and Type D
Corrosivity	Non-corrosive. <i>Mapeplast 400 NC</i> does not contain calcium chloride or other chloride-based components. Its use will not contribute to the increased corrosion of reinforcing steel in concrete.

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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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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