

Mapefluid 441

High-Range, Water-Reducing Admixture

FOR PROFESSIONAL USE ONLY

PRODUCT DESCRIPTION

Mapefluid 441 (formerly known as Polychem 441) is a water-soluble, naphthalene-based, high-range water-reducing admixture. *Mapefluid 441* can reduce mixing water up to 30%, producing high-strength concrete with a low water/cement ratio that can be placed at normal levels of workability or can be added to a mix to produce flowing concrete with increased strength. *Mapefluid 441* is chloride-free and non-corrosive. *Mapefluid 441* is recommended for use in all concrete, especially reinforced/prestressed and post-tensioned concrete.

WHERE TO USE

Mapefluid 441 has been designed for use in ready-mixed as well as precast and prestressed concrete applications.

Main applications of *Mapefluid 441*:

- Ready-mixed concrete
- Precast concrete
- Prestressed concrete
- Underground construction
- High-performance concrete
- Flatwork or mass concrete

Features:

- Produces high-flowing concrete
- Suitable for warm-weather construction
- Enhances workability
- Increases strength

MIXING

Mapefluid 441 may be added with the initial water or as a delayed addition. *Mapefluid 441* develops maximum dispersing action when added after the other mix ingredients (cement, aggregates, mineral additions or fillers, and at least 80% of the mixing water).

COMPATIBILITY WITH OTHER PRODUCTS

Mapefluid 441 is compatible with most MAPEI admixtures. It is especially compatible with:

- MAPEI-approved non-chloride accelerators.
- MAPEI-approved retarding admixtures.
- MAPEI-approved viscosity-modifying admixtures.
- MAPEI-approved form-release agents.
- Expansive agents and shrinkage-compensating admixtures to produce shrinkage-resistant concrete.
- Silica fume.
- Fly ash and any other mineral addition.
- Various types of limestone fillers for manufacturing self-consolidating concrete and any other type of concrete that requires these fillers.

LIMITATIONS

Do not use *Mapefluid 441* in conjunction with admixtures containing polycarboxylates.

Technical Data

Consistency	Liquid
Color	Brown
Density	10.01 lbs. per U.S. gal. (1.20 kg per L)
ASTM C494 classification	Type A and Type F
AASHTO M194 classification	Type A and Type F
Primary function	Increases workability and/or reduction of mixing water
Corrosivity	Non-corrosive. <i>Mapefluid 441</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.

DOSAGE RATES

Dosage by volume:

From 3 to 25 U.S. oz. per 100 lbs. of cementitious material (195 to 1 630 mL per 100 kg)

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

PACKAGING

Mapefluid 441 is available by bulk delivery, in 55-U.S.-gal. (208-L) drums and 275-U.S.-gal. (1 041-L) totes.

STORAGE

Mapefluid 441 can be stored for 1 year in sealed containers at between 32°F and 110°F (0°C and 43°C). Protect from freezing. Freezing will not damage *Mapefluid 441*. If product freezes, thaw and agitate it.

ADDITIONAL INFORMATION

Refer to the Safety Data Sheet (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

MAPEI Headquarters of North America

1144 East Newport Center Drive
Deerfield Beach, Florida 33442
1-888-US-MAPEI (1-888-876-2734) / (954) 246-8888

Technical Services

U.S. and Puerto Rico:

Flooring: 1-800-992-6273

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

Canada:

1-800-361-9309

Customer Service

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

Edition Date: March 31, 2026 MK 3000599 (26-1504)

For the most current product data and BEST-BACKEDSM warranty information,
visit www.mapei.com.
All Rights Reserved. © 2026 MAPEI Corporation.

