

Mapefast Super Set Plus

Non-Chloride Accelerating Admixture

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapefast Super Set Plus (formerly known as Polychem Super Set Plus) is a non-chloride, water-reducing admixture formulated to accelerate the strength development and setting time of concrete in cold weather. *Mapefast Super Set Plus* can reduce labor costs associated with the finishing process. Because the non-corrosive *Mapefast Super Set Plus* will not aid in the corrosion of reinforcing steel embedded within the concrete, it is recommended for use in all types of concrete, especially reinforced and prestressed.

FEATURES AND BENEFITS



- Tested and certified by WQA in accordance with NSF/ANSI/CAN Standard 61 and NSF/ANSI 372. For NSF/ANSI/CAN Standard 61 and NSF/ANSI 372 usage restrictions, visit www.wqa.org.

INDUSTRY STANDARDS

Mapefast Super Set Plus meets or exceeds the requirements of ASTM C494, Type C, CRD C87, as well as AASHTO M194.

TYPICAL COMPRESSIVE STRENGTHS

Mix rate: 21 U.S. oz. of *Mapefast Super Set Plus* per 100 lbs. of cement (or 370 mL per 100 kg)

Per 517 lbs. per cu. yd. (305 kg per m ³) of cement, with a 4" (10 cm) slump	Control mixture	Mixture with <i>Mapefast Super Set Plus</i>
3 days	3,420 psi (23.6 MPa)	4,400 psi (30.3 MPa)
7 days	4,120 psi (28.4 MPa)	4,510 psi (31.1 MPa)
28 days	5,080 psi (35.0 MPa)	5,260 psi (36.3 MPa)

TYPICAL SETTING TIMES – ASTM C403

Mix rate: 21 U.S. oz. of *Mapefast Super Set Plus* per 100 lbs. of cement (or 370 mL per 100 kg)

Per 517 lbs. per cu. yd. (305 kg per m ³) of cement, with a 4" (10 cm) slump	Control mixture	Mixture with <i>Mapefast Super Set Plus</i>
Initial set	3 hours, 57 minutes	2 hours, 49 minutes
Final set	5 hours, 20 minutes	4 hours, 5 minutes

WHERE TO USE

Mapefast Super Set Plus is recommended for use in all types of concrete, especially reinforced and prestressed.

In plastic concrete, *Mapefast Super Set Plus*:

- Accelerates setting times.
- Ensures superior and earlier finishing of slabs (flatwork) and can reduce labor costs associated with the finishing process.
- Reduces heating costs and protection time related to curing in cold weather.
- Reduces segregation and bleeding.

In hardened concrete, *Mapefast Super Set Plus*:

- Increases early-age strengths.
- Ensures superior finished appearance.
- Ensures early stripping and reuse of formworks.
- Reduces cracking.

MIXING

Mapefast Super Set Plus can be added at the concrete plant or on the jobsite. When it is used with other admixtures, dispense each admixture separately into the mix. If *Mapefast Super Set Plus* is added after the initial mixing sequence, concrete should be mixed for an additional 5 minutes to ensure proper mixing.

COMPATIBILITY WITH OTHER PRODUCTS

Mapefast Super Set Plus is compatible with most products for preparing quality concrete. It is especially compatible with:

- Standard air-entraining admixtures.
- Viscosity-modifying admixtures.
- Approved MAPEI form-release agents for releasing concrete from formworks.
- Expansive agents and shrinkage-compensating admixtures to produce shrinkage-resistant concrete.
- Curing compounds from the *Mapecure* product family to protect against rapid water evaporation.
- Silica-fume-based powder additions.
- Class C and Class F fly ash.
- Ground-granulated blast-furnace slag (GGBFS).
- Various types of limestone fillers for manufacturing self-consolidating concrete and any other type of concrete that requires these fillers.
- All types of Portland cements.

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.

DOSAGE RATES

Use 8 to 32 U.S. oz. per 100 lbs. (520 to 2 080 mL per 100 kg) of cementitious material, depending upon the acceleration needed/required, the ambient temperature and the concrete temperature. Dosage rates outside of the suggested range should be tested before using in production. Contact MAPEI's Technical Services Department for assistance.

PACKAGING

Mapefast Super Set Plus is available by bulk delivery, in 55 U.S. gal. (208 L) drums and in 275 U.S. gal. (1 041 L) totes.

STORAGE

The typical freezing point of *Mapefast Super Set Plus* is 5°F (-15°C). *Mapefast Super Set Plus* should be protected against freezing. In the event that freezing does occur, thaw and mildly agitate the product to restore original consistency. Air pressure is not recommended.

Technical Data

Consistency	Liquid
Color	Blue
Primary function	Acceleration of setting and hardening time
ASTM C494 classification	Type C
Corrosivity	Non-corrosive. <i>Mapefast Super Set Plus</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.
Density	10.49 lbs. per U.S. gal. (1.26 kg per L)

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) or sustainability-durabilite@mapei.com (Canada).

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