

Mapefast Super Set II

Non-Chloride Accelerating Admixture

FOR PROFESSIONAL USE ONLY

DESCRIPTION

Mapefast Super Set II (formerly known as Polychem Super Set II) is a non-chloride, accelerating and water-reducing admixture formulated to accelerate strength development and setting time of concrete in cold weather.

WHERE TO USE

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

In plastic concrete, *Mapefast Super Set II*:

- Accelerates setting times.
- Accelerates strength development.
- Ensures earlier finishing of slabs (flatwork) and reduces labor costs associated with the finishing process.
- Offers superior workability.
- Offers superior finishing characteristics for cast surfaces and flatwork.
- Reduces heating costs and protection time in cold weather.
- Reduces segregation and bleeding.

In hardened concrete, *Mapefast Super Set II*:

- Increases early-age strength gain.
- Improves concrete durability.
- Ensures superior surface appearance.
- Promotes earlier stripping of forms.
- Increases protection for reinforcement of concrete.

APPLICATION PROCEDURE

Mapefast Super Set II can be added at the concrete plant or at the jobsite if required. When it is used with other admixtures, dispense each admixture separately into the mix. If *Mapefast Super Set II* is added after the initial mixing sequence, concrete should be mixed for 1 minute per cubic yard (0.76 m³), for a minimum of 5 minutes, to ensure proper mixing.

COMPATIBILITY WITH OTHER PRODUCTS

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

- MAPEI high-range water reducers.
- MAPEI approved air-entraining admixtures.
- MAPEI approved non-chloride and chloride accelerators.
- MAPEI approved viscosity-modifying admixtures.
- MAPEI approved form-release agents.
- Silica fume-based powder additions.
- Fly ash and any other kind of cementitious addition.
- 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

Mapefast Super Set II is recommended for use at a dose of 6 to 32 fl. oz. per 100 lbs. (390 to 2 080 mL per 100 kg) of cementitious material, dependent upon acceleration required, the ambient temperature and the concrete temperatures involved.

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

PACKAGING

Mapefast Super Set II is available by bulk delivery, in drums (55 U.S. gals. or 208 L), and in totes (275 U.S. gals. or 1 040 L).

STORAGE

Mapefast Super Set II can be stored for 1 year in sealed containers at temperatures above -20°F (-29°C). Although freezing does not harm *Mapefast Super Set II*, 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.

Product Properties

Consistency	Liquid
Color	Red
Density	11.93 lbs. per U.S. gal. (1.43 kg per L)
Main action	Acceleration of setting and hardening times; water reduction
ASTM C494 classification	Type C and Type E
AASHTO M194 classification	Type C and Type E
Corrosivity	Non-corrosive. <i>Mapefast Super Set II</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.

Typical Compressive Strengths*

	Control	<i>Mapefast Super Set II</i>
3 days	3,120 psi (21.5 MPa)	3,920 psi (27.0 MPa)
7 days	4,070 psi (28.1 MPa)	4,850 psi (33.4 MPa)
28 days	5,000 psi (34.5 MPa)	5,770 psi (39.8 MPa)

Typical Setting Times*

Phase	Control (hours:minutes)	<i>Mapefast Super Set II</i> (hours:minutes)
Initial	5:25	3:55
Final	6:56	5:26

* 517 lbs. cement per cu. yd. (307 kg per m³) – 3.75" (9.5 cm) slump. *Mapefast Super Set II*: 18 fl. oz. per 100 lbs. (174 mL per 100 kg) cement.

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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Customer Service

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