

Mapetard R

Set retarding admixture



PRODUCT DESCRIPTION

Mapetard® R is a set retarding admixture based on sodium gluconate, used to control the setting of concrete.

Mapetard® R is normally used in combination with other admixtures, e.g. **Mapecfluid®** or **Mapecplast®**.

Mapetard® R is used for concrete subjected to longer transportation times, for complicated casting procedures, or where a cast without joints is desirable despite interruptions in the casting work.

TECHNICAL PROPERTIES

Addition of **Mapetard® R** to concrete or mortar will delay the setting time. The delay in time is dependent upon several factors; the amount of admixture used (as part of the quantity of cement), type of cement, quality of the concrete, temperature of the construction, presence of other admixtures (e.g. silica).

It is therefore recommended to undertake test casting using actual materials, especially for larger pours where accuracy of setting time is crucial.

Mapetard® R also has a dispersing effect on the cement and is slightly water reducing. These properties give improved workability and better quality of casting (improved slump) for the same amount of water.

DOSAGE

Normal dosage of **Mapetard® R** is from 0.2 to 1.0% of cement by weight.

When adding manually dilution of **Mapetard® R** with water (e.g. 1:1) is recommended for a more accurate dosage.

RECOMMENDATIONS

Mapetard® R is added together with the mixing water directly into the mixer.

Mapetard® R should not be added any later as this can give extra long and variable setting times.

In addition special care must be taken with regard to heat transferred from underlying or adjacent concrete. This can be compensated for by the addition of an increased amount of **Mapetard® R**, or by gradually increasing the amount of admixture throughout the casting.

PACKAGING

Mapetard® R is available in 25 liter cans, 200 liter drums, 1000 liter IBC containers and in tank.

STORAGE

The product must be stored at temperatures between +8 and +35°C, and will retain its properties for at least one year if stored unopened in its original packaging. If the product is exposed to direct sunlight, colour variation may occur, but this will not affect the technical properties of the product.

Mapetard R

SAFETY INSTRUCTIONS FOR PREPARATION AND USE

Mapetard® R is not considered dangerous according to European regulations regarding classification of chemicals. It is recommended to wear gloves and goggles and to take usual precautions for handling of chemicals.

For further and complete information about safe use of our product, please refer to our latest version of the Safety Data Sheet.

PRODUCT FOR PROFESSIONAL USE

WARNING

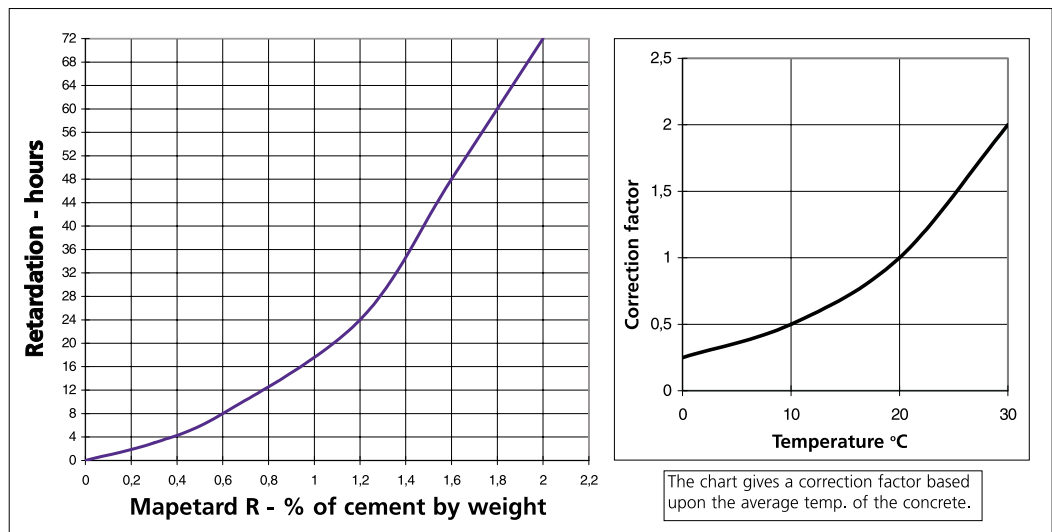
Although the technical details and recommendations contained in this product data sheet correspond to the best of our knowledge and experience, all the above - information must, in every case, be taken as merely indicative and subject to confirmation after long-term practical application: for this reason, anyone who intends to use the product must ensure beforehand that it is suitable for the envisaged application: in every case, the user alone is fully responsible for any consequences deriving from the use of the product.

Please refer to the current version of the technical data sheet, available from our web site www.mapei.com

All relevant references for the product are available upon request and from www.mapei.com

Retardation on addition of Mapetard R

Standard cement, W/C 0,6 and temperature 18 - 20°C (CEM-1 -42,5 R)



CHART

Guidelines to the required dosage are based upon the retardation time multiplied by a correction factor for the average temperature.

TECHNICAL DATA (typical values)

PRODUCT IDENTITY

Appearance:	liquid
Colour:	blue
Viscosity:	easy flowing; < 10 mPa*S
Solids content, %:	20.0 ± 1.0
Density, g/cm ³ :	1.10 ± 0.02
pH:	6.5 ± 1
Chloride content, %:	< 0.05
Alkali content (equiv. Na ₂ O) %:	< 3.5

CONCRETE PROPERTIES

	Reference	Added Mapetard R
Standard cement, kg/m ³ CEM I-42,5 R (Norcem standard):	350	350
Admixture dosage (% by weight of cement):	0	0.4
Water to cement ratio:	0.52	0.50
Water reduction, (%):	-	5
Consistency, slump value (mm):	75	80
Air volume, (%):	2.5	2.6
Time to setting:	5hr. 00min.	8hr. 45min.
Compressive strength (N/mm ² cubes):		
- after 24 hours	19	20
- after 7 days	36	41
- after 28 days	44	52