Technical Data Sheet
Art. No. 0251

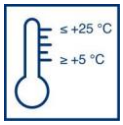
Plasticizer (FM)

Highly effective plasticizer for concrete, reinforced concrete and pre-stressed concrete according to EN 934-2: T3.1/3.2

EC Certificate: 0921-CPR-2006
Notification body: Qualitätsgemeinschaft Deutsche Bauchemie

Water based


For use indoors and outdoors



Working temperature

Total application rate cement / concrete admixture

Shelf-life


Store frost-free and cool protected from/ moisture in closed containers

Range of use

Remmers Plasticizer (FM) can be used for concrete, reinforced concrete, pre-stressed concrete, high early strength concrete, water impermeable concrete, low-shrink concrete, ready-mixed concrete, fair-faced concrete and concrete with strong resistance to chemical attack in accordance with DIN 4030 and for collection basins. Also for concrete elements that are stripped early and as a plasticizer for mortars.

Property profile

Remmers Plasticizer (FM) is a highly effective plasticizer with the following special properties:

- Can be used as a normal plasticizer or as a super plasticizer, depending on the quantity added
- Saves water, plasticizing or used in combination
- Depending on quantity added, increases early strength up to 50 % after 24 hours while saving water (up to 25 %) and reducing the water-cement ratio.
- Clearly increases ultimate strength by saving water
- Continuous increase in consistence to flow concrete (depending on quantity added) with the same quantity of cement and water
- Improves water impermeability of concrete according to DIN 1045 against pressure water and moisture (particularly when 1.0 to 2.2 % by mass of the cement content is added)
- Improves the surfaces of fair-faced concrete
- Reduces labour costs since the concrete can be worked easily, quickly and reliably

Characteristic data of the product

Colour	brown liquid
Base	modified, aqueous, condensation product
Uniformity	homogeneous, no segregation
Active ingredients	as set out in reference spectrum
Solid content:	16 %
Density at + 20 °C:	approx. 1.08 g/cm³
pH value:	approx. 8
Total chlorine content:	≤ 0.10 % by mass
Water soluble chloride content:	≤ 0.10 % by mass
Alkali content:	< 5.0 %

Directions

Remmers Plasticizer (FM) is added to the water used for mixing the concrete or added last. The required mixing time after the plasticizer has been added depends on the mixing equipment used but should be at least 1 minute or until a uniform consistence has been achieved.

In the case of ready-mixed concrete, the plasticizer can be subsequently added in the mixing vehicle at the building site; in this case the mixing time should be at least 5 minutes.

Remmers Baustofftechnik 49624 Löningen Tel 05432/83-0 Fax: 05432/3985 www.remmers.de

Recommended range:
2.0 to 20.0 ml per kg cement or 0.2 to 2.2 % by mass of cement weight.

Highest quantity:
20 ml per kg cement or 2.2 % by mass of cement weight.

Large quantities (1.5 - 2.2 % by mass of cement weight) should only be used for concrete with a low initial consistence (up to approx. 40 cm).

To determine the exact quantity to be added, a suitability test pursuant to DIN 206-1 in conjunction with 1045-2 is required before use.

When producing concrete, reinforced concrete and cement mortars, the rules of DIN 1045 concerning thorough mixing, placement, compaction and keeping damp should be observed in general.

Notes

Remmers Plasticizer (FM) should not be used after the use-by date has expired (1 year after production date).
Production plant: Remmers Baustofftechnik GmbH, 49624 Löningen.
Remmers Plasticizer (FM) is subject to certified Factory Production Control in accordance with EN 934-2.

Tools, cleaning

Positive mixer for concrete and mortar as well as conventional equipment for transport, compaction and placement

Packaging, quantity required, shelf-life

Packaging:
2 kg and 30 kg plastic canisters (containers upon request)

Quantity required:
0.2 - 2.2 % by mass of cement weight, depending on quantity added approx. 1.0 l up to 7.0 l per m³ concrete.

Shelf-life:
1 year in closed containers stored cool but frost-free

Safety, ecology, disposal

Further information on safety when transporting, storing and handling as well as disposal and ecology is found in the latest Safety Data Sheet.

CE

0921 – CPR - 2006

Remmers Baustofftechnik GmbH
Bernhard-Remmers-Str. 13
D – 49624 Löningen

Year: see date of manufacture

GBI F 005-1

EN 934-2:2009+A1:2012

High range water reducing admixtures/superplasicizing admixture for concrete
EN 934-2:T3.1/3.2

Chloride ion content	max.≤ 0,1 % by mass
Alkali content	max. < 5,0 % by mass
Corrosion behaviour	Contains components only from EN 934-1:2008, Annex A.1
Compressive strength	T 3.1 (2) At 1 day: Test mix ≥ 140 % of control mix At 28 days: Test mix ≥ 115 % of control mix
	T 3.2 (3) At 28 days: test mix ≥ 90 % of control mix
Water reduction	In test mix ≥ 12 % compared with control mix
Air content	Test mix ≤ 2 % by volume above control mix unless stated
Consistency	T 3.2 (1) Increase in flow ≥ 160 mm from initial (350 ± 20) mm
	T 3.2 (2) Retention of consistence 30 min after the addition the consistence of the test mix shall not fall below the value of the initial consistence of the control mix
Dangerous substances	NPD

The statements above are compiled from our field of production and according to the latest technological developments and application techniques.

Since application and working are beyond our control, no liability of the producer can be derived from the contents of this information sheet. Any statements made beyond the contents of this information must be confirmed in writing by the producer.

In all cases, our general conditions of sale are valid.
With the publication of this Technical Information Sheet all previous editions are no longer valid.

Remmers (UK) Limited Crawley
United Kingdom
Tel: +44(0) 845 373 0103
Fax: +44(0)845 373 0104
www.remmers.co.uk