

CUGLATON® HSM 1MM

- CUGLATON HSM 1MM is a shrink-proof mortar based on Portland cement.
- CUGLATON HSM 1MM has been specially developed for constructions where high strength is required, both for steel structures and "High Performance Concrete".
- CUGLATON HSM 1MM is a mortar with a high workability a stability, which is ideal for pumping.

Applications


Civil and public utilities / prefab construction	Grouting prefab concrete elements Casting gains Anchoring reinforcement steel
Industrial construction	Bonding heavily laden anchors Anchoring reinforcement steel
Concrete construction and hydraulic engineering	Bonding anchors Grouting supports Anchoring reinforcement steel

Classification in accordance with CUR Recommendation 24 Non-Shrink mortars



Mortar sort	Grout
Mortar type	1 mm
Strength class	7 days K 80 28 days B 90
Exposure class	X0 t/m XA3
Swelling	> 0,1% < 2,0 %
Shrinkage	< 0,96 mm/m

Classification according to NEN-EN 1504-6

 0956	
CUGLA BV , Rudonk 6a, 4824 AJ BREDA 16 0956-CPR-0707	
NEN-EN 1504-6	
DoP: EM0008-02-10-2023	
Anchoring grout	
Pull out strength	≤ 0,6 mm at load of 75 KN
Chloride ion content	≤ 0,05 %
Reaction to fire	Klasse A
Dangerous substances	Comply with 5.3

Directions for use

Pre-treatment

The surface onto which CUGLATON HSM 1MM has to be applied needs to be clean. The cement skin coating should be removed and no free water may be present.

- Pre-treatment with water.
The surface must only be moistened with water (Please note: No free water!)
- or
- Pre-treatment CUGLACRETE HECHTPRIMER CEMENTGEBONDEN or CUGLACRETE HECHTPRIMER EPOXY SEALER.
For an optimum bond we advise the use of CUGLACRETE HECHTPRIMER CEMENTGEBONDEN, a cement polymer modified system, or CUGLACRETE HECHTPRIMER EPOXY SEALER, an epoxy-based system.

Mixing

Mechanically mix CUGLATON HSM 1MM until it becomes a homogeneous mixture. Mixing time depends on the type of mixer, approx. 3 minutes.

Water dosage

Water bandwidth: 2,5 – 3,0 ltr/20 kg mortar. Dose, within the indicated water bandwidth, with plenty of water so as to produce a mortar with a flow of approx. 650 mm.

Follow-up treatment

The finished surface must be carefully protected against dehydration with CUGLA CURING COMPOUND, or by covering with a plastic sheet.

Storage and shelf life

If stored in a dry place it has a shelf life of up to 6 months after production date, as stated on the packaging.

Technical data at 20°C/65% RH

Maximum grain		0,6	mm	
Chloride content		< 0,05	%	
Cement		Portland		
Water bandwidth		2,5 – 3,0	ltr/20 kg mortar	
Consumption per m³ approx.		1960	kg	
Density	EN 12350-6	2250	kg/m ³	
Layer thickness		50	mm max.	
Workability	EN 13395-2	t = 0 min.	650	mm
	EN 13395-2	t = 30 min.	500	mm
Setting time	ASTM C827/87	30	minutes	
Swelling v/v	ASTM C827/87	> 0,1 en < 2,0	%	
Pull out test	EN 1881	Dry	0,44	mm
		Wet	0,27	mm
Shrinkage	EN 12617-4	24 hours	< 0,60	mm/m
		28 days	< 1,4	mm/m

Strength development	EN 196-1	24 hours	7 days	28 days	91 days
Flexural strength	N/mm ²	8	9	10	
Compressive strength	N/mm ²	54	85	100	105

Cuglaton® does not contain any chlorine, nor any other corrosive substances. For application at temperatures < 0 °C please contact Cugla B.V.

Health aspects

Cugla advises:

- To wear appropriate personal protective equipment (PPE)
- To avoid contact with eyes and skin.
- In case of contact with the eyes, rinse immediately with plenty of water and seek medical advice.
- In case of swallowing the product, immediately contact a doctor and show the package or the safety data sheet.

Safety data sheets, SDS, are available via our website www.cugla.com.

Changes to this document will not automatically be issued. Any previous product information hereby becomes null and void. The above data is provided to the best of our knowledge. The tests have been carried out under laboratory conditions. We will not accept any liability for the results achieved on the work, now that we have no influence on the process nor the specific conditions of the work.

Our general sales, delivery and payment conditions apply to all our transactions and are available at www.cugla.com.