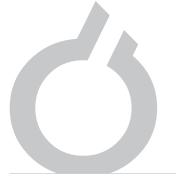


# Chemion Cellulose Ethers

<image>

chemionag.com





#### Company Profile

Chemion AG, founded in Switzerland to supply specialty chemical raw materials and aims to spread its activities to a wide world geography. The company keeps the deep know-how of a family that has been involved in the chemical industry since 1950s.

Chemion AG aims to make a difference in the field of chemical raw materials trading with its new and flexible company structure, experienced and proactive team, supply chain that caters to a broad spectrum of sectoral basis, laboratories, product control and quality of its technical support.

Chemion AG, offers its products and services in paint, construction chemicals, plastics, ink, paper, cosmetics and personal care sectors. The company also develops formulas for the specific needs of its clients.

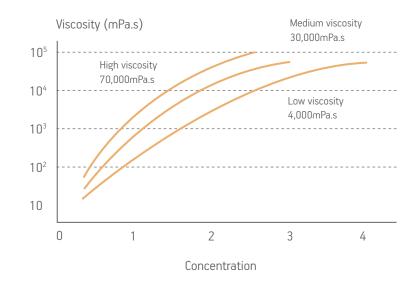
Chemion AG, who stands out with its comprehensive knowledge of Chinese raw material market and keeps a know-how that is almost 70 year old in its foundations. Chemion AG offers the best quality product to ensure the most affordable price to its clients all over the world.

In the founding philosophy of Chemion AG, a global understanding of the Western trade model and the productivity of the East lies together. With this understanding, the company is launching a new era in the trade of chemical raw materials.

#### **CHEMION Cellulose Ethers**

- Hydroxypropyl Methyl Cellulose (HPMC)
- Hydroxyethyl Methyl Cellulose (MHEC)
- Hydroxyethyl Cellulose (HEC)

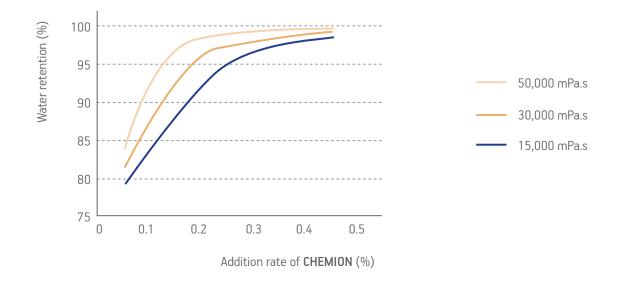


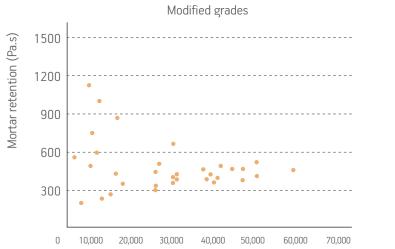


# Relationship between viscosity and concentration

In general, viscosity is proportional to the concentration of solution

Limited to about 25% for high viscosity grade. (Over 15,000mPa.s, 2% solution)





%2 Solution viscosity (mPas.)

# Hydroxypropyl Methyl Cellulose (HPMC) and Hydroxyethyl Methyl Cellulose (MHEC)

- Optimizing demand of water amount
- Provides easy workability
- Rheology control and anti-sagging property
- Extending working time
- Improves strength

STRUCTURE	MODIFICATION	VISCOSITY		APPLICATION
Hydroxypropyl Methyl Cellulose HPMC <b>(HP)</b> / Hydroxyethyl Methyl Cellulose MHEC <b>(MH)</b>	Non-Modified <b>(A)</b> / Modified <b>(B)</b>	20	15.000-25.000*	Dry Mix <b>(D)</b>
		40	35.000-40.000*	
		60	45.000-60.000*	
		80	65.000-80.000*	

\*mPa.s, Base on Brookfield, %2 solution at 20°C

#### Exp: CHEMION HPB 60 D





### Tile Adhesives (CTA)

Tile adhesives one of the main application of dry mix construction chemicals and CHEMION Cellulose Ethers commits improved open time, water retention and resistance to sagging for cement base dry mix tile adhesives.



APPLICATION	STANDARD		DOSAGE	RECOMMENDED GRADES	ADVANTAGE
		C1 C1T	%0,20 -%0,40	CHEMION HPA 40 D	Basic Application
	Basic	C1-C1T		CHEMION HPA 60 D	Minimum Dosage
	High C2T CTA		%0,35 -%0,50	CHEMION HPB 60 D	Long Open Time
CTA		C2T		CHEMION MHB 40 D	Long Open Time, Strong Anti-Slip
LIA				CHEMION MHB 60 D	Long Open Time, Strong Anti-Slip
	Premium C2TE			CHEMION HPB 60 D	Good Sag Resistance, Long Open Time
Premium		%0,40 -%0,60	CHEMION MHB 80 D	Excellent Water Retention, Long Open Time	
				CHEMION HPB 80 D	Excellent Water Retention, Long Open Time

### Joint Filler (Tile Grout)

CHEMION Cellulose Ethers offers best solution for joint fillers which are using in gaps between tiles. For the best adhesion power, workability and minimum shrinkage.



APPLICATION	DOSAGE	RECOMMENDED GRADES	ADVANTAGE
Joint Filler %0,08		CHEMION HPB 20 D	Good Workability
	%0,08 -%0,10	CHEMION HPB 40 D	Good Workability
		CHEMION HPB 60 D	Perfect Workability, Low Shrinkage
		CHEMION MHB 40 D	Perfect Workability, Low Shrinkage

## External Thermal Insulation Composite Systems (ETICS)

Adhesive mortars for insulation boards required strong adhesion power and excellent workability. You can achieve best performance with CHEMION Cellulose Ethers even under high heat conditions and you can have very good anti-sagging performance with long term of durability.



APPLICATION	DOSAGE	RECOMMENDED GRADES	ADVANTAGE
Etics	%0,20 -%0,40	CHEMION MHB 60 D	Good Workability
		CHEMION HPB 60 D	Good Sagging
		CHEMION MHB 80 D	Perfect Workability, Long Open Time, High Heat Resistance
		CHEMION HPB 80 D	Perfect Workability, Long Open Time, High Heat Resistance

#### **Renders and Skimcoats**

You have best workability and water retention with CHEMION Cellulose Ether for Renders and Skimcoats. Prevent from efflorescence and good bonding performance as well as.



APPLICATION	DOSAGE	RECOMMENDED GRADES	ADVANTAGE
Render / Skimcoat	%0,20 -%0,35	CHEMION MHB 60 D	Good Water Retention, Easy Apply
		CHEMION HPB 60 D	Good Water Retention, Easy Apply, High Temprature Durability
		CHEMION MHB 80 D	Good Water Retention, Easy Apply
		CHEMION HPB 80 D	Good Water Retention, Easy Apply, High Temprature Durability

# Gypsum Plaster

CHEMION Cellulose Ethers can offer best improved hydrophobicity and thixotropicity effects for gypsum base plasters. You will get very good workability and high sagging resistance with high water retention.



APPLICATION	TYPE	RECOMMENDED GRADES	ADVANTAGE
	Plaster	CHEMION MHB 40 D	Good Workability
		CHEMION MHB 60 D	Good Workability, High Water Retention
Gypsum Plaster	Machine Spray	CHEMION MHB 60 D	High Water Retention, Good Anti-Sagging
		CHEMION HPB 60 D	High Water Retention, Good Anti-Sagging
	Hand Mixed	CHEMION MHB 80 D	High Water Retention, Good Anti-Sagging, Excellent Workability
		CHEMION HPB 80 D	High Water Retention, Good Anti-Sagging, Excellent Workability



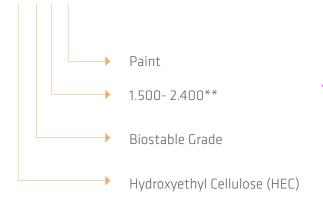
## Hydroxyethyl Cellulose (HEC)

- Provides thickening
- Storage stability
- Water retention
- Helps film forming
- Prevent Sagging

STRUCTURE	MODIFICATION	VISCOSITY		APPLICATION
Hydroxyethyl Cellulose HEC <b>(HE)</b>	Standart <b>(S)</b> / Biostable Grade <b>(B)</b>	15	1.100-1.500**	Paint <b>(P)</b>
		30	1.500-2.400**	
		50	2.400-3.000**	
		100	4.400-6.000**	

\*\*mPa.s, Base on Brookfield, %1 solution at 25°C)

#### **Exp: CHEMION HEB 30 P**





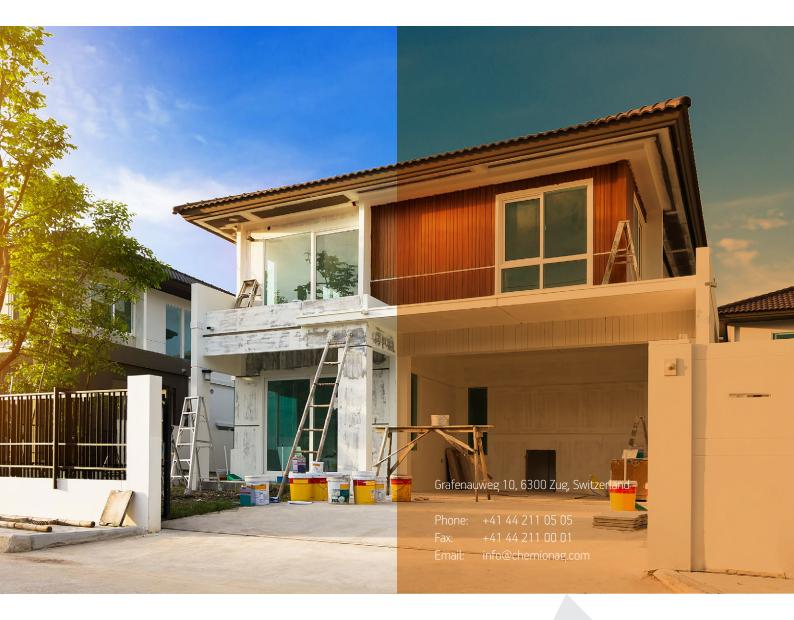
#### Paint

Hydroxyethyl cellulose (HEC) is a nonionic, water-soluble polymer that can thicken, suspend, bind, emulsify, form films, stabilize, disperse, retain water, and provide protective colloid action. It is readily soluble in hot or cold water and can be used to prepare solutions with a wide range of viscosities. Main application for HEC is water base paints.





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