

METHYLCELLULOSE

(low and high viscosity)

FEATURES

Methylcellulose is a natural binder made from wood cellulose and behaves like soluble fibers. It produces very viscous solutions when diluted in water. There are two types : **METHYLCELLULOSE low viscosity** and **METHYLCELLULOSE high viscosity** . **METHYLCELLULOSE low viscosity** is obtained by reacting cellulose with methyl chloride. And **METHYLCELLULOSE High viscosity** (hydroxypropyl methylcellulose) is obtained by reacting cellulose with methyl chloride and propylene oxide. The effectiveness of this product is fundamentally explained by its ability to bind, thicken, stabilize, disperse, maintain in suspension fillers or pigments, emulsify, retain water and glue.

- **Technical characteristics**

Methylcellulose comes in the form of an odorless white powder .

low viscosity METHYLCELLULOSE	Limit	Unit	Method
Sodium chloride	2.0 max	%	DOWM 100187 – ME95C
Humidity, packaged	3.0 max	%	DOWM 100667 – ME95A
Viscosity, 2% water	350-550	CPS	DOWM 101537 – ME95A
Particle size (40 US standard sieve)	99 Min	%	DOWM 100669 – ME89A

HIGH VISCOSITY METHYLCELLULOSE	LIMIT	UNIT	METHOD
Methoxyl	16.5-20.0	%	DOWM 100755
Hydroxypropyl	23.0-32.0	%	DOWM 100755
Sodium chloride	.0 max	%	DOWM 10018
Humidity, packaged	5	%	DOWM 100667
Viscosity, 2% water	7.0 max	CPS	DOWM 101662
Particle size (40 US standard sieve)	10000-16500	%	DOWM 100669

METHYLCELLULOSE	Low viscosity	High viscosity
Ionic activity	Neutral, non-ionic	Neutral, non-ionic
Surfactant activity	Very foamy	Low foaming
Solubility	In cold water	In water, temperature indifferent
Water retention	Very good	Very good
Influence of PH	No lumps	No lumps
As the temperature increases, the viscosity decreases.	Neutral, non-ionic	Neutral, non-ionic

• **Use**

Methylcellulose is used in the preparation of glues, water-based paints, whitewashes, mortars, plasters, and lime stuccos. **METHYLCELLULOSE** is an adjuvant and water-retaining agent. It prevents pigments from settling (sedimentation), provides unparalleled smoothness and consistency, and increases adhesion. **METHYLCELLULOSE PROMOTES** proper hardening of lime and increases the workability of mortars. It protects mortars and paints from drying out too quickly to prevent certain accidents such as cracking and splitting.

Methylcellulose has also long been the main binder for gouaches thanks to its reversibility .

It is also used in the food and pharmaceutical industries.

INSTRUCTIONS FOR USE

Typical quantities: 23 milliliters of water for one gram of **METHYLCELLULOSE powder** (total: 24 grams), or 125 grams of **METHYLCELLULOSE** for 3 liters of water.

Method: add water to the powder, not the other way around, then mix well and shake well.

Another possibility: mix the binder in powder form with the pigment before adding the water.

It is recommended to prepare only the necessary quantity. The dosage of **METHYLCELLULOSE** is very variable and depends on its use (preparation of paint, mortar, stucco, gouache, etc.) and the type of binder used (lime, synthetic resins, egg, etc.). **METHYLCELLULOSE** can represent one to four-fifths by weight compared to the binder. It is recommended to carry out tests.

PRECAUTION FOR USE

Natural and inert product, not dangerous for health or the environment.

CONSERVATION

Virtually unlimited in raw state in original sealed packaging, protected from frost and moisture.

It is advisable to use the prepared solutions quickly.

PACKAGING

1 kg bag and 25 kg bag.

The information contained in this sheet is an expression of our knowledge and test results; it cannot under any circumstances be considered as providing a guarantee or engaging our liability in the event of defective application. It is recommended to carry out a control surface.