

## Celova® MFC Powder

Commodity Name: Microfibrillated cellulose, cellulose microfibrils  
CAS No: 9004-34-6, alternatively 65996-61-4 & 56-81-5  
HS Code: 4703.2900

Celova® Microfibrillated Cellulose (MFC) is a natural, sustainable and biodegradable material that serves as an alternative to synthetic ingredients, in a wide range of applications. The powder material is produced by a purely mechanical process (patent pending) that uses cellulose pulp as a raw material.

With a 45% MFC content, Celova® MFC Powder offers the most efficient logistics and broad use as multifunctional additive, dispersible in water or polar liquids for formulations in various industrial applications, including coatings, adhesives, biotechnology, liquid filtration, membranes, and films.

Technical Specifications			
Parameter	Range	Unit	Method
Form	powder	-	Internal method
Color	white to off white	-	Internal method
MFC content	40 – 60	%	Internal method
Residual moisture	≤ 10.0	%	Internal method
pH (@6%)	4 – 9	-	Internal method
Viscosity (@6%)	≥15	Pas	Internal method

Material contains glycerol

Storage Conditions	
<b>Storage</b>	Store in a dry, cool place. Once opened packaging needs to be closed tightly to protect the product from humidity.
<b>Shelf Life</b>	Up to 24 months from the date of production in original, sealed package.
Slight differences to the above given values may arise due to the natural origin of the products.	

Packaging Type	
<b>Samples</b>	150g bag
<b>Commercial</b>	5kg cardboard box

# Handling Instructions

## Celova® Microfibrillated Cellulose Powder

Celova® microfibrillated cellulose powder consists of 45% microfibrillated cellulose and approximately 45% Glycerin and is a natural, sustainable and biodegradable material. The material is produced by a purely mechanical and thermal process that uses cellulose pulp as a raw material. To preserve the naturality of Celova® products no biocides are added. That means any contamination can lead to microbial growth. To ensure the quality over time certain rules apply for handling. Inspect seals upon material reception to ensure containers have not been opened. Report issues promptly!

### Contamination Risks:



Opening of original,  
sealed containers



Taking samples



Container left open  
after use attracts  
water (hygroscopic)



Transfer of product  
into smaller containers

### Handling Recommendations:



Disinfect any tools  
or containers with  
70% Ethanol in  
Water



Store at ambient  
temperatures



Do not store  
in direct sunlight

### Dispersion Recommendations:



Use a high shear mixing equipment at shear rate  $>14'000\text{s}^{-1}$ . The minimum concentration of Powder in liquid  $> 6\%$  (Celova® Care Powder  $>1-2\%$ )

The powder can be redispersed in polar liquids using high shear equipment. The high shear forces are needed to unfold the cellulose fibrils into a homogenous gel. The fibrils will not be shortened or affected by the high shear forces. To achieve a homogenous and high viscous suspension its recommended to use a minimum of 6% powder to liquid ratio (Celova® Care Powder  $> 1-2\%$ ). Measuring the viscosity of the gel gives an indication of the level of dispersion. Undispersed powder particles can be detected with a microscope.

If you have further enquiries please do not hesitate to contact the Weidmann Fiber Technology Team under:  
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