

BORREGAARD AS P. O. Box 162 N-1701 Sarpsborg, Norway Tel. + 47 69 11 81 86 Fax + 47 69 11 88 11

E-mail: borregaard@borregaard.com Enterprise No. NO 895 623 032 vat

Doc. No.: BRGQMS-7-2614

Version 1.0 Date: 11.11.2016

Technical Data Sheet

Exilva® F 01-L

Microfibrillated Cellulose

Exilva F 01-L is a bio-based pre-activated multifunctional additive. Exilva F 01-L increases your formulation efficiency, reduces your CO_2 footprint and creates exciting opportunities for innovation.

Typical characteristics

Solid content (%)	1 -3
Viscosity in H₂O (2%, mPas)	>20 000
Conductivity (2%, µS/cm)	<500
pH (2% in H ₂ 0)	5-7
Water holding capacity (gH ₂ 0/g)	≥70
Color	White to off-white
CAS no. (Cellulose)	9004-34-6

Key properties

High aspect ratio and large surface area with many available OH groups. Pseudoplastic and extremely shear thinning with high viscosity at rest. Forms non-soluble fiber network with polymer-like properties and high yield stress. Stable at high temperatures (up to 200°C) and in pH from 1-13. High crystallinity. Zero VOC. Non-toxic.

Examples of product benefits from using Exilva F 01-L

Increased formulation stability, improved flow and sag/drip control, enhanced spray ability of thick formulations, improved workability, structuring, enhanced properties of films/cured formulations; oxygen barrier and reinforcing effect, good water resistance.



Efficiency in use

Typical dosage level of Exilva F 01-L is 0.05%-0.75% (dry matter) of the total product system formulation. The optimal dosage will depend on the formulation. Exilva F 01-L is a multifunctional performance additive offering opportunities to replace or reduce several components in a complex formulation.

Incorporation

- 1. Introduce Exilva F 01-L in the water/polar phase, preferably in an early process step (e.g. grinding, dispersing, emulsifying).
- 2. Disperse Exilva F 01-L thoroughly (high shear) in this water/polar phase.

Packaging examples

Shipped in IBC's, ISO containers and bulk.

Storage

Recommended storage temperature: ambient or lower. Damaged when frozen. Not sterilized nor preserved. Avoid contamination, use gloves and clean equipment.

Shelf life

Provided stored as advised, the product has a shelf life of minimum one year from date of production.