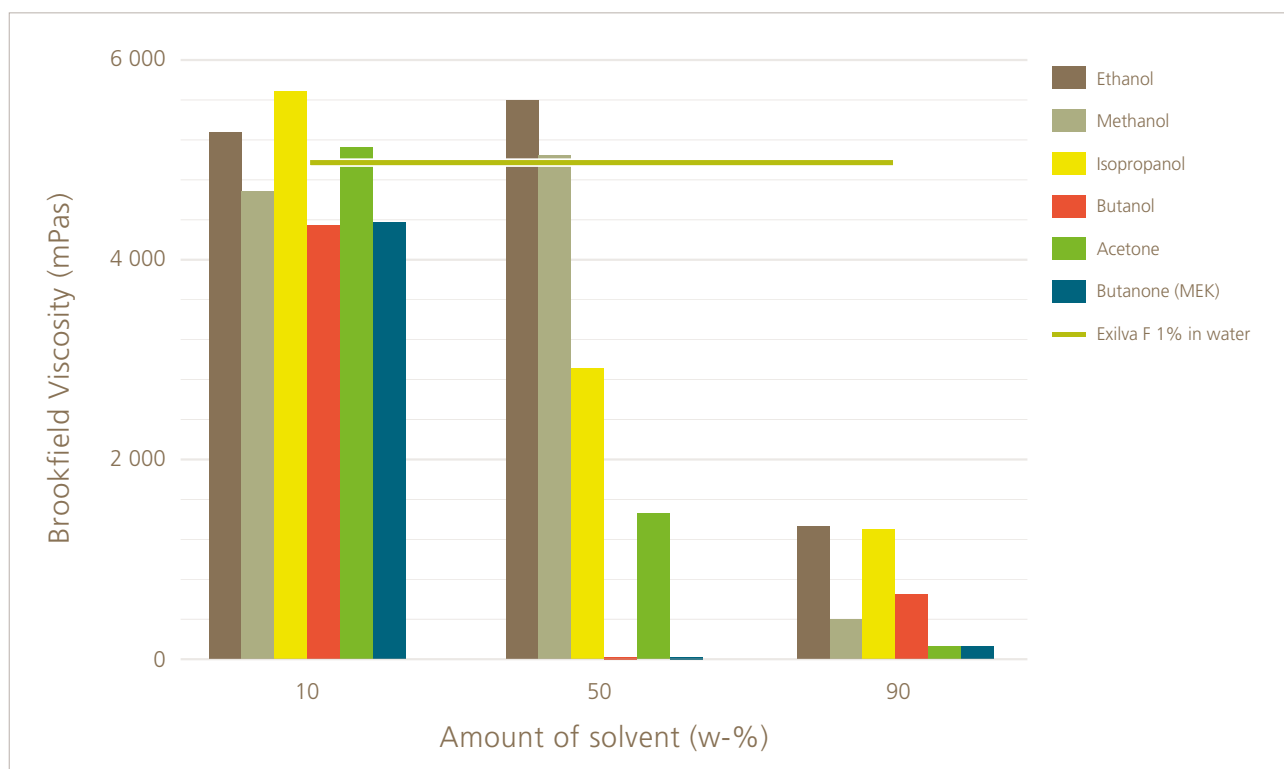# OXILVA

THE NATURAL PERFORMANCE ENHANCER

INCROPROTATION OF EXILVA IN SOLVENT BASED SYSTEMS

EXILVA SOLVENT COMPATIBILITY

Exilva shows high level of compatibility with common polar organic solvents. The good compatibility of Exilva with solvents allows the incorporation of Exilva into solvent based systems such as paints, coatings and adhesives. By using Exilva 10% paste, you are able to create low water content solvent based systems with Exilva.

ALCOHOLS AND KETONES

Exilva can be mixed with common alcohols and ketones up to 10% without losing the viscosity effect of Exilva. When the partial amount of the solvent is increased above that, some solvents start to cause aggregation of the fibers, leading to lower viscosity. Exilva tolerates ethanol and methanol up to 50 w-%. Even 90% methanol or ethanol can be added without phase separation, but the viscosity is clearly lower than in pure water. However, in a final formulation containing other components, the reduction will usually be lower or not detectable, especially when hydrogen bonding compounds are present.

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GLYCOLS AND GLYCOL ETHERS

Glycols and glycol ethers are hydrogen bonding solvents which have strong interactions with cellulose. When these solvents are mixed with Exilva they will strengthen the fiber network, leading to higher viscosity compared to Exilva/water suspensions. In case of glycerol, ethylene glycol and propylene glycol, the viscosity increase is significant.
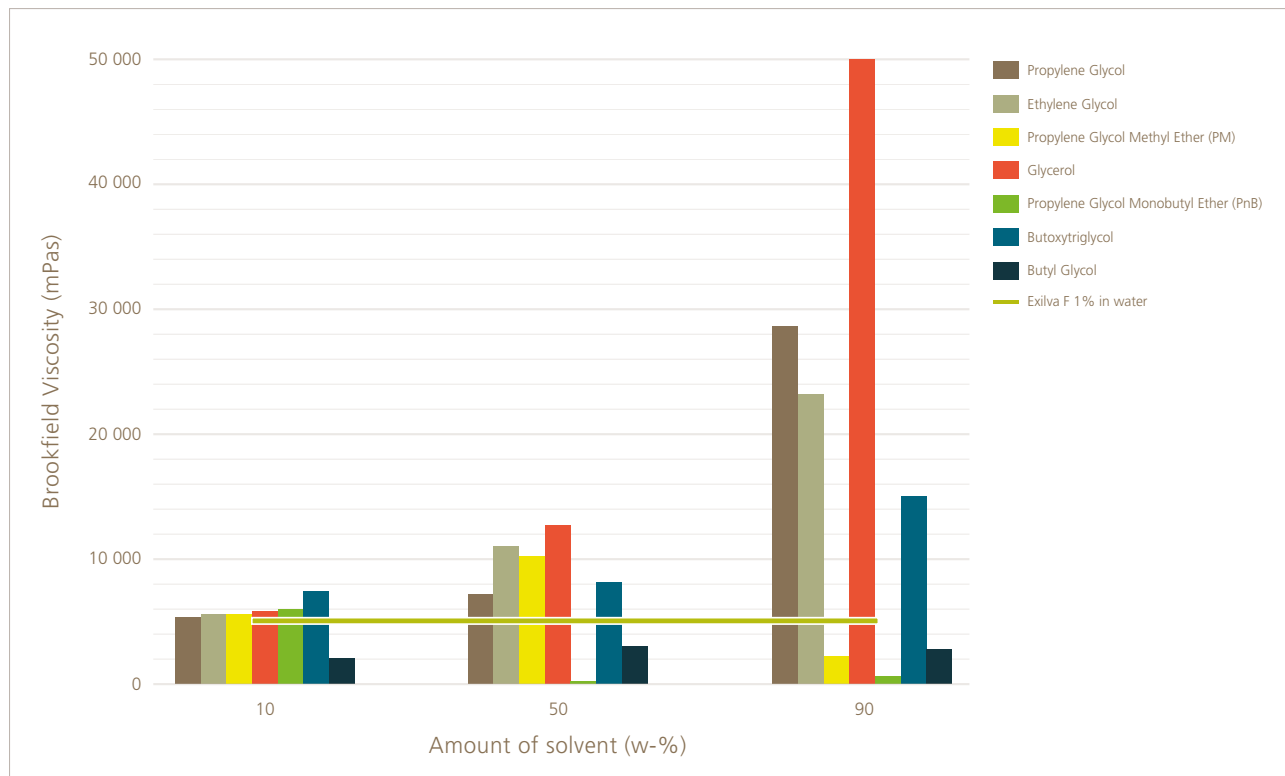
METHODS

Samples were made from 10% Exilva F by diluting with corresponding water/solvent mixture, resulting in 1% solid content (sample size 200 g). Water and solvent were first mixed together. Exilva was mixed in using Ultra Turrax (10.000 rpm / 4 min). Brookfield viscosity was measured with a V-73 spindle at 10 rpm after 5 min measurement time.

SUMMARY

Exilva can be diluted and mixed with several polar organic solvents that are miscible with water. The actual effect of the solvent in a final formulation will depend on other solvents included, compounds, and their dosages.

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