

SOLUTIONS TO OPTIMISE PAPERMAKING

Achieve more with lower additions



Enhance performance and enable savings with OPTIPRO[®] wet-end biopolymers

Improving strength, retention and drainage gains while saving on manufacturing costs, are now possible in papermaking. The OPTIPRO[®] wet-end biopolymers require low addition levels enabling cost savings. Derived from nature and developed using green chemistry, they are also better for the environment.

CONVENIENCE & PERFORMANCE™



Ingredion
idea labs[®]
IDEAS TO SOLUTIONS

Manufacture better paper products, **cost-efficiently**

Using the OPTIPRO® wet-end biopolymers at the dosage recommended by Ingression biopolymer specialists can improve the internal and surface strength of paper and board, therefore reducing the total dosage of chemicals needed and saving on manufacturing costs. At the same time, it helps to lower the Chemical Oxygen Demand (COD) and Biological Oxygen Demand (BOD) of the papermaking system since lesser amounts of organic materials are used.

Cost savings

- Adopt lower additions of this product, from 0.5kg/MT up to 5.0kg/MT as compared to using 10-15kg/MT for other products in the market. This can be achieved as OPTIPRO® wet-end biopolymers, made using a proprietary process in our plants, are highly reactive. The nature-based polymers have a high charge density per unit area.
- Improve the retention of fibres used for making the paper hence reducing fibre loss throughout the papermaking process. Fibres can be costly, so better retention saves raw material costs.
- Provide a wider window of operation for the use of wet-end chemicals. OPTIPRO® wet-end biopolymers reduce the need of using synthetic cationic chemicals, which is better for the environment and at the same time simplifying the wet-end system of the papermaking environment, eventually leading to cost savings. These benefits are highly desired by paper makers.

Higher performance

- Improve the retention of fillers that need to be loaded into the papermaking system. Adding more fillers into paper results in loss of paper strength. OPTIPRO® wet-end biopolymers can help to increase filler retention without sacrificing the strength of paper.
- Improve linting and dusting control on the daily operation of the paper machine, thereby producing paper sheets with higher quality. This lowers the frequency of paper breaks that can happen on the machine, thereby lowering the machine downtime, which helps to improve overall production efficiency.
- Improve performance under the challenging wet-end conditions of a papermaking environment, especially when the conductivity of the papermaking system has exceeded 2500 µS/cm.
- Use together with pulp furnishes such as Bleached Hardwood Kraft Pulp (BHKP), Bleached Softwood Kraft Pulp (BSKP), Bleached Chemical Thermo-Mechanical Pulp (BCTMP) as well as De-Inking Pulp (DIP) and various types of Old Corrugated Carton (OCC) furnish.

Solutions aligned with your needs

Choose from our range of OPTIPRO® wet-end biopolymers based on your specific papermaking requirements.

Product Series	Reactivity	Strength Provider	Application
OPTIPRO® 830CP	Moderate	Good	Moderately anionic system
OPTIPRO® 850	High	Very Good	Highly anionic system
OPTIPRO® 858	High	Very Good	Highly anionic system
OPTIPRO® 880	Very High	Superior	Severely anionic system
OPTIPRO® 880L	Very High	Superior	Severely anionic system
OPTIPRO® 8250	Very High	Superior with charge balance	Challenging wet-end system



Innovate with **CONVENIENCE & PERFORMANCE**
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