

HOW TO USE Borresperse® Paper



Borresperse Paper is a ready-to-use product delivered as a liquid or a powder to the customer's site. It's applied in liquid form and there is no need for cooking, processing or any modification.

Borresperse Paper is added in liquid form to fresh, diluted starch in work-tank(s). All you need is a simple dose-line, including in-line pump(s), flow-meters and pipeline to the work-tank(s).

PACKAGING AND DELIVERY

POWDER 🔔

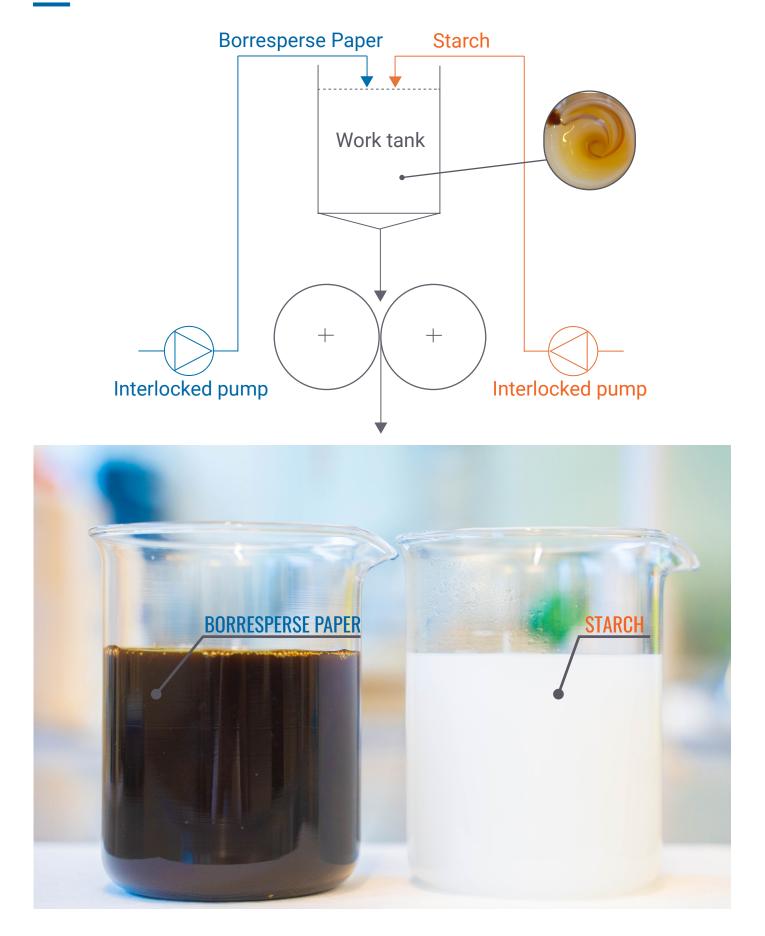
Typical packaging form of powder product is 25kg sack (1250 kg pallet) or BigBag.

Liquid product can be delivered in IBC's, tanker truck, Flexitanks or Isotainers. The dry-solids and/or the pH of the product can be set to meet your expectations and requirements. Further customising and fine-tuning upon request is possible.





HOW TO INTRODUCE IT IN YOUR PROCESS

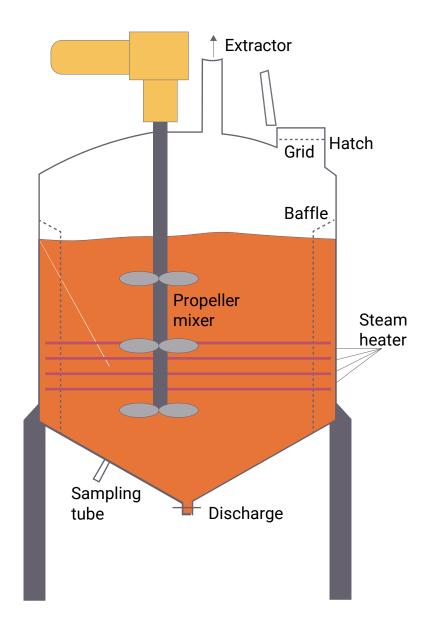


DISSOLVING BORRESPERSE PAPER

Please use an extractor to remove evaporated dust or gas.

The mixing vessel should be 30 % larger than the the intended batch size. The additional capacity is to accommodate unmixed material, foam that may be generated during the dissolving process and for adding additional raw material for adjusting. The vessel should be cylindrical with a conical bottom and a discharge pipe located at the lowest point. To improve mixing efficiency, it may be desirable to fit three to five vertical baffles. These baffles create vortices that improve mixing. Loading of raw materials is facilitated through a hatch on the top equipped with a grid that prevents debris such as paper sacks and tools from entry. For cold areas, a heater is recommended. An electrically driven, eccentric located slow speed stirrer is used. To achieve good agitation, it is recommended to mount two or three mixer blades to the shaft of the stirrer at different heights above the base level.

It is recommended to measure water with a balance or water meter. A dipstick or a graduated sight glass may also be fitted. A balance with a fork lift is commonly used for powder measurement to top up the finished product.



BORRESPERSE PAPER NATURALLY STRONG

TECHNICAL SUPPORT

Our competent technical and commercial team is available to evaluate your process and help you optimising the application of Borresperse Paper products, from installation to production.

Please <u>contact us</u> for further information.

ABOUT US 28

Borregaard operates the world's most advanced and sustainable biorefinery. Utilizing natural and sustainable raw materials, we produce advanced and environmentally friendly bio-based products that replace oilbased products. Our world-wide network of production facilities, technical centres and sales offices assures the very best local service and competence where you need it. Providing our customers with the most dedicated technical assistance is essential to success. Therefore, we invest considerable resources for research and development. We continuously strive to develop wood based renewable products for existing and new applications and through this effort we can offer sustainable products that contribute to sustainable development in a wide variety of industries.

