

Press information

Two new PVOH types for Europe: KURARAY POVAL™ 3-88 and 6-96 for paper coatings and adhesives with perfect flow properties

Kuraray is commencing production of two new polyvinyl alcohol (PVOH) grades in Europe: KURARAY POVAL™ 3-88 for low-viscosity coatings and water-resistant KURARAY POVAL™ 6-96, which is ideal for food packaging.

Hattersheim, June 18, 2020. Polyvinyl alcohols are important for the production of adhesives and paper coatings: they give the formulations the right viscosity and adhesive properties or act as carriers for optical brightening agents (OBAs) that give paper its brilliant whiteness. At the same time, the industry wants PVOH grades with specific rheological properties that speed up processes and make processing more efficient. Speciality chemicals producer Kuraray, which has its European headquarters in Hattersheim, Germany, is introducing two new PVOH grades at its Frankfurt production facilities: KURARAY POVAL™ 3-88 has very low viscosity, making it particularly suitable for use in adhesives and emulsion polymerization. KURARAY POVAL™ 6-96 is a completely new, partially hydrolzyed PVOH that is as water-resistant as fully hydrolyzed products, making it ideal for using in packaging for wet foods such as meat and dairy products.

"Low-viscosity coatings and adhesives are becoming increasingly important in modern industrial processes. Thanks to their specific rheological properties, they help speed up processes and reduce production times," says Heiko Mack, Head of Poval Business at Kuraray. "Our PVOH raw material KURARAY POVAL™ 3-88 is ideally suited to such applications. To meet rising demand, with immediate effect we will be producing it directly at our European location in Höchst Industrial Park near Frankfurt. At the same time, we are launching KURARAY POVAL™ 6-96, a completely new, partially hydrolyzed PVOH grade with excellent water resistance that comes close to that of fully hydrolyzed products and meets the international requirements for food contact use with wet food."

KURARAY POVAL™ 3-88: low viscosity for efficient processes

KURARAY POVAL[™] 3-88 has special rheological properties, making it especially suitable for the production of adhesives, paper coatings and dispersing powder with particularly low viscosity. In emulsion polymerization, KURARAY POVAL[™] 3-88 produces low-viscosity blends with finer particles. Moreover, their flowability is consistently stable due to their thixotropic properties. The improved penetration properties of the product ensure even better

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penetration of paper and other materials, giving adhesives and coatings very good adhesion. The low molecular weight of KURARAY POVAL™ 3-88 ensures especially good solubility. In addition, it can be used to produce coating formulations with a higher solids content without reducing their sensitivity to water.

KURARAY POVAL™ 6-96: Water-resistant PVOH for food packaging
KURARAY POVAL™ 6-96 is a new, partially hydrolyzed PVOH grade. Its very
good water resistant is close to that of fully hydrolyzed products, so it is ideal
for coating packaging for wet foods. "The properties of fully hydrolyzed PVOH
products are highly suitable for use in packaging. However, their use in such
applications is restricted in countries such as China," says Heiko Mack. "As a
partially hydrolyzed PVOH, KURARAY POVAL 6-96 meets Chinese standard
GB 9685-2016 and its performance is similar to that of fully hydrolyzed PVOH
grades." And there is another benefit: KURARAY POVAL™ 6-96 does not gel
and has very stable viscosity. The water resistance and very good film-forming
properties of this PVOH grade make it ideal for use as an OBA carrier.

"With KURARAY POVAL™ 3-88 and KURARAY POVAL™ 6-96, we are offering industrial users two further, high-performance PVOH products for adhesives, paper coatings and dispersing powder," says Heiko Mack. "Producing them at our European facilities in Höchst Industrial Park near Frankfurt enhances supply chain reliability and makes them available faster. At the same time, our customers benefit from our technical support."

Photo captions/source: Kuraray



[Photo 1] "With KURARAY POVAL™ 3-88 and KURARAY POVAL™ 6-96, we are offering industrial users two further, high-performance PVOH products for paper coatings, polymerization, adhesives and dispersing powder," says Heiko Mack, Head of Poval Business at Kuraray. "Producing them at our facilities in Höchst Industrial Park near Frankfurt makes them available to our customers faster and enhances the supply chain reliability."

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[Photo 2] For more efficiency and faster processes: the special rheological properties of KURARAY POVAL™ 3-88 give adhesives and paper coatings low viscosity. In emulsion polymerization, this PVOH material produces emulsions with very fine particles and consistently stable flowability.

[Photo 3] New water-resistant grade for food packaging: KURARAY POVAL™ 6-96 is a new, partially hydrolyzed PVOH with water resistance that is comparable to that of fully hydrolyzed PVOH grades. This material is ideal for food contact packaging for wet food and as a carrier for OBAs.

About Kuraray

Established in 1991, Kuraray Europe GmbH is based in Hattersheim, near Frankfurt am Main, Germany. In 2019 the company generated annual sales of EUR 661 million. It has more than 700 employees in Germany at its sites in Hattersheim, Frankfurt and Troisdorf. Kuraray is a global speciality chemicals company and one of the largest suppliers of industrial polymers and synthetic microfibres for many sectors of industry. Examples are KURARAY POVAL™, Mowital®, Trosifol® and CLEARFIL™. Kuraray Europe also has around 200 employees at six other European sites. They are also working on the development and application of innovative high-performance materials for a wide range of sectors, including the automotive, paper, glass and packaging industries, as well as for architects and dentists.

Kuraray Europe is a wholly owned subsidiary of the publicly listed Kuraray Co., Ltd., which is based in Tokyo, Japan, and has more than 11,100 employees worldwide and sales of EUR 4.7 billion.

You will find this press release including pictures on our website at https://www.kuraray.eu/company/media

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