



© 123RF



RAW MATERIALS

Kuraray's product range Mowital®: let's bind better!

From an interview with Mr. Jörg Bruss, Director, Global Business – PVB Technical Resin at Kuraray Europe GmbH

Based on its mission "For people and the planet - to achieve what no one else can", the Kuraray Group has aimed to develop businesses that contribute to society ever since its establishment.

Founded in 1926, Kuraray Co. Ltd is a Japanese chemical company which in 1950 was the first in the world to commercialize polyvinyl alcohol (PVA) fiber, under the brand name KURALON™. This was the first

synthetic fiber invented in Japan, and led the early phase of Japan's synthetic fiber industry. Since then, Kuraray has expanded worldwide: today, the Group includes Kuraray Europe GmbH, Kuraray America Inc.

and Kuraray South America Ltd.. Mowital® is the trademark for a wide range of different polyvinyl butyral resins (PVB) marketed by Kuraray Europe GmbH. ipcm® interviewed Jörg Bruss, Director

of Business Unit PVB Technical Resin at Kuraray Europe GmbH to find out more about technical features of Mowital®, its application and about what sustainability means for Kuraray Group.

Ipcm®: Can you outline Kuraray's PVB Technical Resin Business?

JB: "We are a strong player in the Technical Resin Market. Our trademark Mowital® stands for a wide range of different polyvinyl butyrals (PVB) marketed by Kuraray Europe GmbH. With the Mowital® brand, Kuraray is the European market leader and one of the world's

largest manufacturers of technical PVB materials."

Ipcm®: Why should customers decide for Mowital?

JB: "We are binding is our commitment. Our binding agent Mowital® gives numerous technical applications just the right binding - and as the European market leaders, we are the experts. For our customers, we are binding business partners and offer a service tailored to their needs. "Binding" can also mean "engaging" and "interesting". Mowital offers not only an exciting product that yields benefits for numerous applications, but

also an exciting team of competent experts."

Ipcm®: What are PVB resins main technical characteristics and properties?

JB: "Mowital® polyvinyl butyral has excellent adhesion and film-forming properties, high binding power and outstanding optical transparency. It is soluble in many organic solvents and can be combined with a wide range of reaction partners. From coatings and paints to adhesives and films: Polyvinyl butyrals (PVB) guarantee the right bond as a binder in numerous applications."

© Kuraray Co., Ltd



Jörg Bruss, Director, Global Business – PVB Technical Resin at Kuraray Europe GmbH.

lpcm®: What are their applications in the coating industry?

JB: "Modern coatings have to do more than adhere well. They should be easy to work with, harmonize with numerous binders, and serve additional functions such as corrosion protection. Mowital® polyvinyl butyral (PVB) technical resin is the ideal basis for all these requirements. Mowital® films display a very good adhesion to steel, iron, zinc, aluminium and other light metals. Nevertheless, adhesive strength and corrosion protection can be further improved via combinations with phenolic resins, epoxy resins, phosphoric acid and anti-corrosion pigments."

lpcm®: What is Mowital's goal on the market?

JB: "Customers worldwide trust the original Mowital® with its roots in Germany, high quality standards and outstanding service level. This is the claim we make on ourselves and it is something we have to substantiate every day. With our broad product portfolio, we offer materials for innovative applications, such as our thin film for lightweight applications and our granules for demanding 3D printing applications. In addition to our exciting products, which offer advantages for numerous applications, Mowital® also offers an exciting team of competent experts. From research and development to service and sales, the PVB experts work closely together when it comes to tailor-made solutions for their customers - even when very special requirements are called for."

lpcm®: What are the future developments of Mowital® PVB resins?

JB: "You can also benefit from the know-how that Mowital offers you for new applications and production processes. The PVB experts constantly

© 123RF



keep an eye on new technologies and investigate how Mowital® materials enable innovations, for example in the area of 3D Printing. The research team works closely with the "QSHE" (Abbr. for Quality, Safety, Health, Environment) department to ensure the safe use of materials and optimum support for compliance-relevant topics."

lpcm®: What is the focus of Research and Development activities for Mowital®?

JB: "The research and development team at Mowital develops innovative materials that enable you as a user to make your processes more efficient. One example is the temperature-resistant polyvinyl acetal BA 55 HH, which significantly

improves the quality of industrial coating processes such as curtain coating and minimizes the use of materials. For more specialized applications, the research and development team at Mowital develops tailor-made PVB materials with specific butyral, hydroxyl and acetal groups that provide optimal properties for your applications. The technical service experts also support our customers worldwide in optimizing your processes for processing Mowital® polyvinyl butyral materials - for the highest product quality."

lpcm®: What is your approach to sustainability?

JB: "Kuraray is committed to developing new fields of business using pioneering technology that improves the environment and enhances the quality

of life throughout the world. We are currently working on our carbon footprint and have started with a lifecycle analysis for our production, which is part of extensive efforts initiated for the entire company. There are many other examples for excellence in sustainability throughout Kuraray businesses, e.g. the resin EVAL™ has excellent gas barrier properties, and can be used as a packaging material to store food for long periods and thereby helps to reduce food loss and wastage. Hollow-fiber membranes and activated carbon are also essential products for supplying safe water. Activated carbon is a particularly promising product, as its material properties make it easier for a variety of harmful substances to adsorb and desorb. The Kuraray Group also makes biodegradable products derived from biomass, such as the barrier material PLANTIC™, and will offer solutions for environmental issues with these products in a precise and timely manner to cater to market needs."

The United Nations adopted the Sustainable Development Goals (SDGs) - 17 goals and specific aims for achieving them. In order to realize a sustainable world by 2030, Kuraray Group has already put some of these goals into practice.

<https://www.kuraray.com/csr/report2019/materialities>
"Problems related to micro plastics in the oceans and plastic waste are other environmental issues that we must concentrate on as a chemical manufacturer" stated Ito san, Kuraray's President. "Specific circumstances in each country and region mean there is currently no definite course of action in terms of governmental policy or regulations. We understand workstyle reform is to mean the creation of a workplace where a diverse range of people can be confident in their individuality as they work, and where people can feel more comfortable at work and experience high job satisfaction. We will continue promoting diversity across the Group by building a "safe and secure company" and "a company that people can take pride in". On top of these initiatives to reinforce our foundations, we will continue with our aim to be a proud company "growing sustainably" by solving social and environmental issues through "incorporating new foundational platforms into our own technologies". "

In Japan particularly, Kuraray joined a sustainability initiative called CLOMA, led by Ministry of Economy, Trade and Industry <https://cloma.net/english>. The company also became a member of Japan BioPlastic Association for PVOH and PLANTIC™ mainly <http://www.jbpaweb.net/english/english.htm>. ○



Dynamic contour detection Highly automated level of powder coating

- Automated recognition of complex geometries for both the front and rear of the object
- Optimized coating quality
- Powder savings and reduction in overspray
- Drastic reduction of the manual coating operation
- Automated programming of U-axes.
No time consuming axes adjustments



Industry 4.0 Ready

Gema Europe Srl | Via Goldoni, 29
20090 Trezzano s/N | Italy
T +39 02 48 400 486
F +39 02 48 400 874

Gema
gemapowdercoating.com