

Client: BASF

**BASF expands PIB production
To serve customers worldwide**

To meet increased market demand, BASF has expanded production capacity of medium-molecular weight polyisobutene (PIB) by 10,000 metric tons per year at its manufacturing site in Ludwigshafen, Germany. A new plant section became operational in the third quarter, bringing overall BASF capacity for medium-molecular weight PIB to 16,000 metric tons per year.

Depending on the molecular weight, PIB has a broad range of properties and can be used in a multitude of applications. Marketed by BASF under the trade name Oppanol®, this medium-molecular weight PIB is used wide variety of products. Oppanol imparts stickiness in sealants, adhesives and chewing gum... reduces drag in lubricants... provides “clinginess” to plastic food wrap... gives tackiness to roofing sheets... and protects optical fibers without interfering with light transmission.

Leading-edge production ensures purity

The expanded production facility is advanced, flexible and customer-focused. For example, it has been designed so that additional capacity expansions can be made with minor investment, allowing BASF to respond quickly to further increases in customer demand.

The new plant section employs BASF-developed technology that has successfully produced low-molecular weight, highly reactive PIB at the company’s Antwerp site. Regarding purity, BASF’s extensive PIB experience enables it to produce a product without chloride residue, minimizing corrosion during customer processing. The chlorine-free process adjusts molecular weight through selective polymerization of isobutene in the presence of a special catalyst system.

Unlike other processes, BASF production incorporates an additional step at the end of polymerization to minimize solvent. As a result, Oppanol has the lowest solvent content of any medium-molecular weight PIB.

In addition, BASF Oppanol production employs a patented polymerization process delivering a versatile product that can be tailored to specific customer applications.

Highly reactive properties will spur innovation

Because Oppanol is the world's first medium-molecular weight PIB available as a highly reactive material, it opens new areas of application and innovation for customers. Highly reactive, low-molecular weight PIB has long been used as a starting material for chemical modification. Now BASF has extended that technology so that medium-molecular weight Oppanol is highly reactive, and that is expected to drive new development by customers.

A final production step ensures more convenient, safer Oppanol use by BASF customers: Packaging. Unlike alternative medium-molecular weight PIB available only in drums, BASF Oppanol can be ordered either in drums for automated unloading or in boxes for safer opening by hand.

World's widest range of PIB

Since it began PIB production in 1938, BASF has developed increasingly sophisticated technologies and expanded capacities stepwise over time. Today the BASF PIB portfolio is the largest in the world, extending from very low-molecular weight (500) up to ultra high-molecular weight (1Mill) material.

With more choice from the industry's largest PIB portfolio, customers can create better products and simplify their operations. And as customers develop new uses for PIB, BASF's wide range is expected to spur continued development and product innovation.

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*OPPANOL is a registered trademark of BASF Aktiengesellschaft.