

PIBinside

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The Chemical Company

OPPANOL[®]

KEEPS WINDOWS SEALED

GET THE BROADEST PIB SPECTRUM!



OPPANOL®

keeps windows sealed

A window is more than just an opening that you can see through—it links the building with the outside world and acts as a conduit for light and fresh air. The quality of the insulated glass used in windows is important for a comfortable indoor climate. Today, the spaces between the sheets of glass in windows are nearly always filled with a noble gas in order to enhance the insulation. The seals have to remain intact, even after years of weathering. The glazing seal that encloses the insulated window glass has to be impervious to gas and water vapor. Glazing seals based on Oppanol®, the polyisobutene (PIB) supplied by BASF, fulfill these stringent demands. Flexible, waterproof and resistant to UV radiation, Oppanol® is also extremely durable. This is why leading manufacturers of sealants for insulated glass such as KÖMMERLING Chemische Fabrik GmbH, Pirmasens, Germany, use PIB from BASF in Ludwigshafen.



“We have been using Oppanol® from BASF for many decades, and we are very satisfied with the product,” says Ernst Semar, who is responsible for product management and marketing at Kömmerling. Kömmerling is a leading international manufacturer of high-quality adhesives and sealants. The company has been supplying systems to the insulated glass, automotive and construction industries for more than 110 years. Kömmerling is the market leader for insulated glass sealants, and its products are sold in more than 80 countries worldwide. “We selected BASF as our supplier of PIB for reasons of quality, price, service and innovation,” says Semar.

“Oppanol® is a material that is very easy to process, and it’s excellent from an ecological point of view.”

Ernst Semar

Kömmerling uses Oppanol® in the manufacture of a plastic sealant that holds the sheets of glass to the spacer that keeps them apart. The sealant forms a barrier between the glass and the spacer that is impermeable to gases. “Moisture is prevented from entering from outside, and the glass remains free of condensation. The sealant also ensures that the noble gas that is used to improve the heat insulation is not allowed to escape from the voids between the panes,” explains Semar. Poorly insulated windows are expensive, and the latest calculations show that around 40 percent of energy used for heating the average house escapes through the windows. High-quality insulated window sealants made from

What are the needs of the customer? Can we launch new products on the market? These are the questions that the sales staff at BASF and at ADCO are asking themselves. “We are jointly developing new marketing strategies and embarking on new projects in line with BASF’s principle of ‘Helping our customers to be more successful’,” says Marsalko.

Oppanol® help to save money. It is also very important to Kömmerling that its products are environmentally friendly. "Oppanol® is a material that is very easy to process, and it's excellent from an ecological point of view," says the product manager.

The close cooperation between BASF and Kömmerling is not restricted to Europe. In 2000, Kömmerling was acquired by ADCO Global Inc., based in Chicago, Illinois. Since then, there has been intensive cooperation between ADCO and BASF Corporation in Florham Park, New Jersey. Saving energy has become an important issue in the United States because of the constant rises in heating fuels in recent years, and the awareness of the importance of energy conservation shown by the general public has been a source of encouragement to Kömmerling/ADCO and BASF. "In America, the level of interest that is being shown in high-quality insulated glass sealants made from Oppanol® is increasing constantly," says Timea Marsalko, Ph.D., BASF business manager for polyisobutene in the United States.

Dr. Marsalko explains that the aim of this cooperation was to raise the awareness of the U.S. media and decision-makers

such as construction companies and architects for eco-efficient buildings and environmentally friendly materials. An important issue in this field is the insulation of windows. What are the needs of the customer? Can we launch new products on the market? These are the questions that the sales staff at BASF and at ADCO are asking themselves. "We are jointly developing new market-



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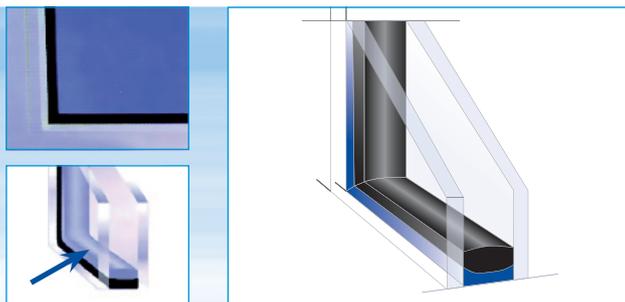
Today, BASF's relationship with ADCO is concentrated on marketing an innovation that is just about to be introduced to the American market. Kömmerling played a leading role in the development of the new thermoplastic spacer technology (TPS®) in Europe. The first TPS® systems were launched on the European market in the mid-1990s. Prior to that, aluminum spacer bars were tradi-

tionally used to keep the sheets of glass in place. "Because metal is a good conductor of heat, it is impossible to prevent some heat escaping with this type of composite structure. Condensation can form on the edge of the window pane if the outside temperature is low. Spacers made from PIB prevent heat from being lost, which makes a vital contribution to enhanced insulation," says Kristin

Tiefensee, Ph.D., who is responsible for the technical marketing of Oppanol® at BASF. "Unlike aluminum spacer bars, they do not need to be bent and they can

be fitted to the glass on a completely automated production line."

The partnership between these two leading companies in their respective fields of technology is paying dividends in a number of ways. "TPS® is a significant new application for Oppanol®, and it is a good example of the innovative potential that can be realized by close cooperation between BASF and Kömmerling/ADCO," says Erwin Czech, Ph.D., BASF's sales manager for polyisobutene in Europe.



Kömmerling insulated glass with spacers made from BASF's Oppanol® gives better thermal insulation.





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A successful cooperation:

Oppanol® from



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