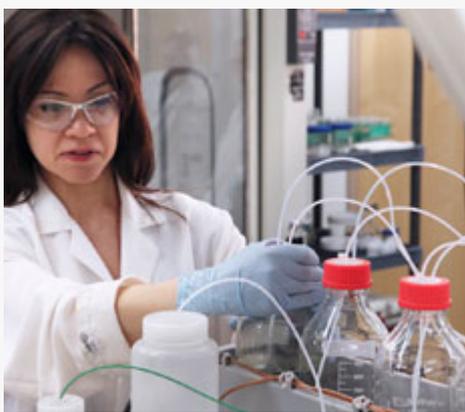




Soy-Based Hydrogels Offer Environmentally Friendly Diapers



New research shows that soybean meal could replace up to one-third of the petrochemical products currently used in diapers and other absorbent products.

Scientists at Battelle, the world's largest independent research and development organization, created a soy-based replacement technology with funding provided by the United Soybean Board (USB) and the Ohio Soybean Council (OSC).

"Soy products have proven their potential to provide economical green solutions for many industries," said Bob Haselwood, United Soybean Board New Uses Chair and Kansas soybean farmer. "U.S. soybean farmers proudly invest dollars in soy-based replacement technology like this that can benefit farmers, consumers and the environment alike."

The new technology uses soybean meal to replace 33 percent of the petrochemical acrylic acid-based superabsorbent polymers (SAPs). SAPs, or hydrogels, make diapers and other materials that absorb liquids effective because a SAP can absorb hundreds of times its weight in liquid.

Battelle's research aims to keep the same absorption rate - 200 to 300 times its own weight-while maintaining a comparable price point. This would provide an equally absorbent product made from sustainable, readily available soybean meal, rather than petrochemicals.

"We believe that everyone wants to be environmentally friendly, but they want products that perform exactly the same as their oil-based counterparts without costing more," said Marty Toomajian, president of Battelle's Energy, Environment and Material Sciences Global Business. "That is what we are trying to do with this new innovation. The aim is to replace a portion of the petroleum-based product with a sustainable one and work to make it cost-effective."

The market for SAPs represents about 1.6 million tons per year, with personal care items making up the vast majority, and diapers account for 83 percent of that market. Even a modest penetration of that market could mean a large replacement of petrochemical products with soy-based products.

To learn more about the soy-based diaper products, visit www.battelle.org. To learn more about industrial uses for soy-based products, visit www.soynewuses.org.