Hexion Inc. Unveils Bonding Paste Optimized for Longer, Heavier Wind Turbine Rotor Blades

March 10, 2015

New BP 535 combines higher mechanical strength and fatigue performance with long open time

Columbus, Ohio—March 10, 2015— Hexion Inc. ("Hexion" or "the Company"), a leading supplier of epoxy resins, curing agents and bonding pastes to wind turbine blade manufacturers around the world, will introduce the EPIKOTE™ MGSTM Resin BP 535/EPIKURE™ MGSTM Curing Agent BPH 538 bonding system at the JEC Europe 2015 Composites Show, March 10-12, in Paris. This new bonding paste, developed specifically for today's larger, high performance rotor blades, combines outstanding strength and fatigue performance with the long processing time needed to manufacture lengthier blades.

As the wind energy industry migrates to larger turbines with longer, heavier rotor blades, a variety of production challenges have emerged. One drawback of conventional bonding paste has been that it can only remain exposed to air for a limited time before its adhesive performance suffers due to surface film formation, or carbamation. Manufacturers often found that they didn't have time get the entire blade processed before the bonding paste would lose its efficacy—often in a little over an hour. In response, Hexion developed a paste that would not form a film until after 4 hours of open time or longer, even at 70 percent relative humidity, allowing manufacturers additional time to lay down the paste and assemble the parts.

"As a recognized leader in resin systems for wind energy applications, we work closely with customers to develop innovative solutions to their particular product and process challenges," says Johannes Meunier, Hexion Global Segment Leader, Composites. "BP 535 is an excellent example of a collaborative solution to the manufacturing problems posed by larger, heavier rotor blades."

In addition to long processing time and high tolerance for environmental humidity, the EPIKOTE BP 535 resin system displays outstanding fatigue performance, improved by one order of magnitude over benchmark BP 435. It also exhibits good sag resistance at elevated temperatures, making it ideal for adhesion of vertical surfaces and across wide gaps. This adhesive resin does not bleed from vertical gaps even if parts are immediately cured at high temperatures (up to 80°C). This attribute, as well as the system's solid TG after curing for only 4 hours, offer possibilities for cycle time reduction. Other process enhancing characteristics of this new bonding paste are a long pot life and a low exotherm.

In addition to the production of rotor blades for wind energy turbines, the EPIKOTE BP 535 resin system is appropriate for manufacturing composites for ships, in sporting goods, molds, tools and other devices. It is suitable for secondary bonding of fiberglass-reinforced plastic (FRP) to FRP and various other materials including wood and appropriately prepared metallic and mineral components.

For more information about this or any of Hexion's other products designed to respond to the evolving needs of rotor blade manufacturers, please visit our onsite commercial team at JEC Paris Expo, Pavillon 7.3, booth M18 or visit www.hexion.com.

About the Company
Based in Columbus, Ohio, Hexion Inc. (formerly known as Momentive Specialty Chemicals Inc.) is a global leader in thermoset resins. Hexion Inc. serves the global wood and industrial markets through a broad range of thermoset technologies, specialty products and technical support for customers in a diverse range of applications and industries. Hexion Inc. is controlled by investment funds affiliated with Apollo Global Management, LLC. Additional information about Hexion Inc. and its products is available at www.hexion.com.

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