

## Press Release

### SABIC Innovative Plastics' New Lexan\* HFD Copolymer Resins with High-Flow, High-Ductility, Top-Performance Edge for Greater Design Freedom

BERGEN OP ZOOM, The Netherlands – October 28, 2009 – SABIC Innovative Plastics today launched a new copolymer technology: Lexan\* HFD specialty copolymer resins, a material innovation that gives customers high melt flow without traditional decreases in toughness; and improved ductility without impacting melt flow. These materials build upon the unmatched clarity, extreme toughness and high-performance for which Lexan polycarbonate (PC) resin is known. The new material opens the door to vast new design options, especially in key application areas where thin-wall parts, complex geometries and high-impact products that can withstand very low temperatures with no compromise on clarity are required.

“Our new Lexan HFD copolymer resins represent a major breakthrough in expanding the capabilities of the Lexan resin PC molecule to meet critical, highly specific customer needs; especially greater design flexibility, extreme top-end performance and outstanding surface aesthetics,” said Bala Ambravaneswaran, global product marketing director, Lexan Copolymer Resins, SABIC Innovative Plastics. “We’ve again raised the bar in advanced thermoplastic innovation and will continue to push the boundaries of our PC technology to help our customers win in the markets they serve.”

Based on proprietary polymer chemistry, Lexan HFD copolymer resins are part of an expanding portfolio of six innovative, specially engineered copolymer materials with extreme performance capabilities, unsurpassed in the industry. By reducing molded-in stress, improving low-temperature impact and delivering stunning surface aesthetics, these unique materials open the door to new, differentiated designs that stand out from the competition.

Drawing on unmatched technological expertise, SABIC Innovative Plastics created this new polymer chemistry that combines two different monomers to ensure the highest performance in demanding applications. To support its goals of creating sustainable material solutions, up to five percent bio content has been incorporated into this new copolymer. Lexan HFD copolymer resins are available in five grades, with or without UV stabilizers. Additionally, the company is developing glass-filled grades with and without flame retardancy, food contact grades, blends incorporating other SABIC Innovative Plastics’ resins, and super high flow grades. The company is committed to providing its customers with the broadest product offering to enable design and manufacturing innovation.

#### **Expanding the Horizons for PC-Based Materials**

Lexan HFD copolymer resins are engineered to provide up to 40 percent higher flow at the molecular weight than standard Lexan resin, thereby preserving desirable mechanical properties. Higher flow helps customers create thinner-wall parts such as appliance and device housings without the risk of cracking upon removal from the mold.

It also reduces molded-in stress to avoid birefringence (“rainbow” effect) in optical applications such as camera lens housings, and to enable designs with sharp notches and corners without fear of breakage. High flow also permits faster processing speeds for higher productivity.

From an aesthetic standpoint, higher flow solves the issues often experienced with glass-filled materials: Lexan HFD copolymers flow around and hide the fibers, producing surface gloss that is 30-40 percent higher compared to a standard glass-filled PC.

At the same time, the materials provide high ductility at colder temperatures (down to -40° C) compared to standard PC, which can become brittle. Clarity is also maintained at these temperatures. These attributes make Lexan HFD copolymer resins ideal for military eyewear, windscreens, and face shields.

Lexan HFD copolymer resins process at a temperature about 20 degrees lower than standard PC with the same ductility. This property allows heat-sensitive additives to be used without impacting their performance. In addition, the lower temperature processing brings advantages to in-mold decoration, and two-shot overmolding.

For additional information on SABIC Innovative Plastics’ portfolio of the six Lexan copolymer resins offering high heat resistance, high flow and ductility, flame/smoke/toxicity performance, ultimate scratch resistance, extreme impact resistance and UV weathering performance, please go to [www.sabic-ip.com](http://www.sabic-ip.com).

## About SABIC Innovative Plastics

SABIC Innovative Plastics is a leading, global supplier of engineering thermoplastics with a 75-year history of breakthrough solutions that solve its customers’ most pressing challenges. Today, SABIC Innovative Plastics is a multi-billion-dollar company with operations in more than 35 countries and approximately 9,000 employees worldwide. The company continues to lead the plastics industry with customer collaboration and continued investments in new polymer technologies, global application development, process technologies, and environmentally responsible solutions that serve diverse markets such as automotive, electronics, building & construction, transportation, and healthcare. The company’s extensive product portfolio includes thermoplastic resins, coatings, specialty compounds, film, and sheet. SABIC Innovative Plastics ([www.sabic-ip.com](http://www.sabic-ip.com)) is a wholly owned subsidiary of Saudi Basic Industries Corporation (SABIC), one of the world’s top five petrochemicals manufacturers.

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\* Trademarks of SABIC Innovative Plastics IP BV.

***Media Note: The proper name of the company is SABIC Innovative Plastics, and excludes any abbreviations or variations when referring to the company. As an acronym, SABIC should be all caps whenever it appears in print.***

## Photo Caption

SABIC Innovative Plastics' New Lexan\* HFD Copolymer Resins with High-Flow, High-Ductility, Top-Performance Edge for Greater Design Freedom



**Photo: Face Shield Made with SABIC Innovative Plastics' Lexan HFD Resin.**

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