

New SABIC Innovative Plastics' Lexan* Copolymer Resins Break the Mold to Deliver Extreme Performance for Most Challenging, Advanced Designs

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BERGEN OP ZOOM, The Netherlands – October 28, 2009 – To meet the ever-increasing performance requirements for new cutting-edge application designs, and to help customers reduce system costs, SABIC Innovative Plastics has developed an extreme performance portfolio of Lexan* polycarbonate (PC) copolymer resins. The fruits of more than a decade of polymer science labor, this new high-end Lexan resin portfolio gives SABIC Innovative Plastics' customers greatly expanded design options to create next-generation solutions to differentiate their products, grow current markets, expand into new markets and application areas, and increase overall productivity and profitability.

SABIC Innovative Plastics' new family of products includes six copolymers with unique chemistries and unmatched capabilities. They include Lexan HFD, Lexan XHT, Lexan FST, Lexan DMX, Lexan SLX, and Lexan EXL resins. The new resins push extreme high heat resistance, excellent flow/ductility, virtually unbreakable impact strength, scratch protection, flame-smoke-toxicity performance and UV protection to higher levels, giving customers exceptional design freedom to meet increasing consumer demand for top-performing products with eye-catching aesthetics.

“Our expanding portfolio of Lexan copolymers clearly underscore SABIC Innovative Plastics' leadership in creating

innovative new thermoplastics to address diverse and evolving customer needs,” said Bala Ambravaneswaran, product marketing director, Lexan Copolymer Resins. To break new ground in performance, we moved away from incremental modifications and introduced radical new monomers in the resin chemistry. This approach has resulted in some unique and best-in-class properties in the Lexan copolymer resins. We have our finger on the pulse of the industry; we continually read the vital signs; and we know what our customers require to excel and grow. “

Lexan Copolymer Resins: Key Features and Applications

- Lexan HFD Resins – These new copolymers provide the best of both worlds: high melt flow without traditional decreases in toughness; and improved ductility without impacting melt flow – an added plus is their unmatched clarity and mechanical performance. Higher flow and ductility enable designs with thinner walls and sharp corners without a risk of cracking when released from the mold.

Key performance features:

- Optical clarity
- Low birefringence
- Low-temperature processing permits use of heat-sensitive additives
- High ductility at temperatures as cold as -40° C
- High flow for Class A surface finish of glass-filled materials
- Bio/green content

Target applications:

- Camera lenses, medical housings
- High-performance safety/specialty eyewear, windscreens and face shields
- Consumer electronics, bezels, appliances

- Lexan XHT Resins – Providing highest performance for extreme heat conditions, these grades address an unmet customer need for flame-retardant PC-based materials in the temperature range of 140° C to 195° C. They offer exceptional clarity and color stability over a long lifespan, and provide greatly improved flow and impact compared to other high-heat PCs.

Key performance features:

- Optical clarity
- Resistance to cracks and haze under metallization
- 30% greater flow length vs. competitive materials
- Resistance to yellowing under UV aging

Target applications:

- Auto bezels, reflectors and lens covers
- Industrial lighting
- Electrical components, fuses

- Lexan FST Resins – Lexan FST copolymer resins are the first transparent materials to meet flame-smoke-toxicity requirements of the aerospace industry – without requiring a waiver. They provide superior chemical resistance vs. standard PC, and can be colored in a range of high-chroma hues including bright whites.

Key performance features:

- Compliance with FAR 25.853a and 25.853d requirements
- Compliance with OSU 55/55 standard
- Ductility and UV stability
- Weight-out for greater fuel conservation

Target applications:

- Aircraft interior components: luggage racks, dust covers and trays
- Rail and ship interiors
- Injection molding, extrusion, fibers

• Lexan DMX Resins – These materials provide exceptional scratch resistance without the need for costly and time-consuming secondary coating operations. Their surface hardness is 2.5 times better than that of standard PC. Further, they provide far greater impact resistance than traditional acrylics such as polymethyl methacrylate.

Key performance features:

- Scratch resistance and pencil hardness of H
- Moisture and oxygen barrier properties
- Ammonia resistance
- Eliminate need for protective coatings

Target applications:

- Keypads and touch screens for electronics
- Bezels (radio, notebooks and tvs)
- Lenses
- Coextruded film and sheet for scratch protection

• Lexan SLX Resins – Lexan SLX copolymer resins deliver superior UV resistance that helps minimize yellowing and embrittlement. Instead of traditional UV absorber additives or coatings, this technology features a proprietary molecule that creates a protective layer over the resin.

Key performance features:

- Improved clarity, color and gloss over the lifetime of the product
- Toughness
- Chemical resistance
- Eliminate need for protective coatings

Target applications:

- Outdoor lighting
- Meter windows
- Outdoor vehicle fenders & hoods, automotive trims

• Lexan EXL Resins – Delivering extreme impact resistance, these materials enable designs with thin walls, sharp notches and steep draft angles without compromising strength and stiffness. Excellent impact performance and durability are maintained even under exposure to harsh conditions and temperatures.

Key performance features:

- Extreme ductility
- Impact retention under heat, humidity and UV exposure
- Chemical resistance
- Processing advantages
- VisualFX, fillers & recycle
- Bio-hemo-compatibility

Target applications:

- Outdoor electrical enclosures
- Telecom, handhelds, mobile phones
- Helmets, safety, automotive
- Medical devices

A new design guide for Lexan EXL copolymer resins is due out by the end of 2009.

The six Lexan copolymer resins are available globally. New copolymers based on this technology are also in development.

For additional information on SABIC Innovative Plastics' Lexan copolymer resins, please go to 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) is a wholly owned subsidiary of Saudi Basic Industries Corporation (SABIC), one of the world's top five petrochemicals manufacturers.

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