

# PRODUCT LINE GUIDE: LEXAN™ COPOLYMER RESINS



## LEXAN EXL resin

- Impact: best-in-class ductility to -60°C, outstanding balance of ductility and flow
- Weatherability: excellent retention of mechanical properties upon outdoor exposure
- Aging: better retention of properties vs. standard polycarbonate after heat/humidity
- Flame retardancy: FR grades to be used in many ECO-compliant applications
- Knitline strength: significant improvement over PC/ABS materials
- Chemical resistance: improved chemical resistance to some chemicals compared to standard polycarbonate



## LEXAN SLX resin

- Compared to acrylic resins: higher heat, greater toughness, higher refractive index
- Compared to ASA resins: higher impact, higher heat, transparency possibilities, improved depth of color
- Compared to UV polycarbonate resins: retention of clarity, color, gloss and mechanical properties
- Compared to fiber reinforced polyester (FRP): retention of color and gloss, lower environmental emissions, transparency possibilities, improved depth of color



## LEXAN XHT resin

- Flexible heat resistance capabilities – highest RTI clear material
- Improved processability at equivalent heat allows for cost savings through design of thinner wall sections
- Outstanding surface aesthetics
- Superior retention of part aesthetics after thermal aging
- Excellent metalized surface finish improves yield



## LEXAN FST resin

- Superior flame, smoke and toxicity performance
- Meets OSU 55/55 requirements and EN45545 rail norm
- Broad color range, including high chroma and bright white colors
- Enhanced chemical resistance compared to standard polycarbonates



## LEXAN HFD resin

- Easy release and easy molding
- Exceptional processing
- Superior flow / ductility
- PC like clarity
- Glossy surface finish with glass filled



## LEXAN CFR resin

- Good extrusion capability and good processability
- Thin wall UL ratings (V0/5VA) with transparency
- UV stabilized
- Non-chlorine and non-brominated flame retardant
- Diffusion and transparent with high forward transmission



INNOVATIVE PLASTICS

## PRODUCT LINE GUIDE

# LEXAN™ COPOLYMER RESINS - PORTFOLIO

MVR: 300°C/1.2kg, cm<sup>3</sup>/10min; <sup>1</sup>MVR: 300°C/2.16kg, cm<sup>3</sup>/10min; Flexural Modulus, 2mm/min, MPa; IZOD Impact, notched 23°C kJ/m<sup>2</sup>; VICAT Softening Temp, Rate B/120°C; UL94 Flame Class Rating

	MVR	Flex Mod	Vicat	IZOD	Density	UL
<b>LEXAN EXL resin</b>						
EXL1112(T)	16	2240	145	747	1.19	-
EXL1414(T)	9	2250	146	865	1.19	94HB/0.4
EXL1810T	33	2250	140	702	1.19	94HB/1.5
EXL4419	10	3300	146	280	1.25	-
EXL5689	8	3400	146	340	1.26	94V-0/1.5
EXL9112	16	2300	144	731	1.19	94V-0/1.52
EXL9134	15	2100	141	785	1.19	94V-0/1.5
EXL9330	9	2200	142	801	1.19	94V-0/1.49
<b>LEXAN SLX resin</b>						
SLX1432	9	2390	140	860	1.23	-
SLX2271T	16	2450	137	780	1.2	94V-2/1.5
<b>LEXAN XHT resin</b>						
XHT2141	43 <sup>1</sup>	2300	162	115	1.2	-
XHT3141	30 <sup>1</sup>	2500	170	97	1.2	94HB/1.5
XHT4141	24 <sup>1</sup>	2600	181	93	1.21	94HB/1.5
<b>LEXAN FST resin</b>						
FST3403	10	2700	115	130	1.33	-
FST9705	4	2320	139	194	1.34	-
<b>LEXAN HFD resin</b>						
HFD1810	38	2180	130	728	1.2	-
HFD4412	14	5850	143	109	1.35	94HB/0.3
<b>LEXAN CFR resin</b>						
CFR7630	5	2500	139	100	1.2	94V-0/1
CFR9111	17	2400	140	600	1.2	94V-0/1.5
<b>LEXAN LUX grades</b>						
LUX913xC*	17	2400	140	100	1.2	94V-0/1.5
LUX743xC*	9	2450	139	100	1.2	94V-0/1.2
LUX763xC	5	2500	139	100	1.2	94V-0/1
* Different varieties in diffusion – based on grade						
<b>LEXAN HP resin</b>						
HPH4504H	3	2120	155	640	1.2	94V-2/1.47
HPX4(R)(EU)	9	2150	142	890	1.19	94V-2/2.5
HPX8(R)(EU)	33	2250	140	702	1.19	94HB/1.5

Please consult our product brochures or company website to view our complete portfolio.

INNOVATIVE PLASTICS  
PRODUCT LINE GUIDE:  
LEXAN™ COPOLYMER RESINS



**Consumer Electronics**

- Superior flow ductility balance
- Chemical resistance
- Knitline strength
- Glossy GF surface
- Aesthetics – deep colors
- IML/IMD suitable properties

Portfolio

**LEXAN EXL, HFD series**

**Automotive**

- Superior metallization for bezels
- High flow and processing ease
- Design flexibility with performance
- Glossy interior trim
- High impact after heat /humidity aging

Portfolio

Lighting Bezels:

**LEXAN XHT series**

Interior:

**LEXAN EXL, SLX series**

**Mass Transportation**

- Low flame, smoke density and toxicity
- OSU, FAR 25.853, EN45545 compliant
- High chroma custom colors
- Individual lot certification

Portfolio

**LEXAN FST series**



**Electrical & Lighting**

- Balance of FR and electrical properties (CTI, RTI, UL ratings, GWIT)
- Flow ductility balance (-40 C ductility)
- Suitable for PV connectors
- Hi transmission with FR properties – clear and diffuse – for LED lighting

Portfolio

Electrical (connectors, meter covers):

**LEXAN EXL, SLX, CFR series**

LED Lighting (covers, lenses, outdoor)

**LEXAN LUX, SLX series**



**Healthcare**

- Meets ISO10993
- Different heat levels
- Gamma, autoclave sterilization
- Chemical resistance to lipids, disinfectants
- Clarity with high impact strength
- Superior flow ductility balance

Portfolio

**LEXAN HPX, HPH, HPF series**

INNOVATIVE PLASTICS

# PRODUCT LINE GUIDE: LEXAN™ COPOLYMER RESINS

---

DISCLAIMER : THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES (“SELLER”), ARE SOLD SUBJECT TO SELLER’S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com> AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER’S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER’S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller’s products, services or recommendations for the user’s particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller’s Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right.

SABIC and brands marked with ™ are trademarks of SABIC or affiliates.  
© 2013 Copyright by SABIC. All Rights Reserved.