

Product Texts

LEXAN™ DMX1435 is a UV stabilized standard flow polycarbonate copolymer resin with improved scratch resistance, improved dielectric performance (lower Df). It is both transparency and colorable available solutions to the applications such as 5G related devices, anti-scratch covers, etc.

UL Yellow Card Link [F45329-100081387](https://www.ul.com/yellow-card/F45329-100081387)

Processing/Physical Characteristics	Value	Unit	Test Standard
ISO Data			
Melt volume-flow rate, MVR	13	cm ³ /10min	ISO 1133
Temperature	300	°C	-
Load	1.2	kg	-
ASTM Data			
Melt Flow Index, MFI	14.5	g/10min	ASTM D 1238
Temperature	300	°C	-
Load	1.2	kg	-

Mechanical properties	Value	Unit	Test Standard
ISO Data			
Tensile Modulus	2450	MPa	ISO 527
Yield stress	80	MPa	ISO 527
Yield strain	7	%	ISO 527
Stress at break	60	MPa	ISO 527
Strain at break	40	%	ISO 527
Flexural modulus	2450	MPa	ISO 178
Charpy impact strength, +23°C, 3mm	N	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C, 3mm	47	kJ/m ²	ISO 179/1eU
Charpy notched impact strength, +23°C, 3mm	3	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C, 3mm	3	kJ/m ²	ISO 179/1eA
Izod impact strength, +23°C	N	kJ/m ²	ISO 180/1U
Izod notched impact strength, +23°C, 3mm	5	kJ/m ²	ISO 180/1A
Izod notched impact strength, -30°C, 3mm	4	kJ/m ²	ISO 180/1A
Ball indentation hardness	128	MPa	ISO 2039-1
ASTM Data			
Tensile Modulus	2900	MPa	ASTM D 638
Tensile Strength at Yield	80	MPa	ASTM D 638
Tensile Strength at Break	65	MPa	ASTM D 638
Elongation at Yield	7	%	ASTM D 638
Elongation at Break	70	%	ASTM D 638
Flexural Modulus	2600	MPa	ASTM D 790
Rockwell Hardness	M 93	-	ASTM D 785
Taber Abrasion Resistance	10	mg/1000 cycles	ASTM D 1044
Izod Impact notched, 1/8 in	30	J/m	ASTM D 256
Izod Impact notched, Low-Temperature	30	J/m	ASTM D 256
Temperature	-30	°C	-
Izod Impact unnotched, 1/8 in	N	J/m	ASTM D 256

Thermal properties	Value	Unit	Test Standard
ISO Data			
Temp. of deflection under load, 1.80 MPa	118	°C	ISO 75-1/-2
Temp. of deflection under load, 0.45 MPa	131	°C	ISO 75-1/-2
Vicat softening temperature, B	138	°C	ISO 306
Vicat softening temperature, 120°C/h 50N	140	°C	ISO 306
Burning behav. at thickness h	HB	class	IEC 60695-11-10
Thickness tested	0.6	mm	-
Thermal Conductivity	0.2	W/(m K)	DIN 52616
Glow Wire Flammability Index (GWFI)	900	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Flammability Index (GWFI)	960	°C	IEC 60695-2-12
Glow Wire Ignition Temperature (GWIT)	850	°C	IEC 60695-2-13

LEXAN™ Copolymer DMX1435 - Europe

PC

Saudi Basic Industries Corporation (SABIC)

GWIT - thickness tested (1)	1	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (2)	2	mm	-
Glow Wire Ignition Temperature (GWIT)	825	°C	IEC 60695-2-13
GWIT - thickness tested (3)	3	mm	-

ASTM Data

DTUL @ 66 psi	133	°C	ASTM D 648
DTUL @ 264 psi	119	°C	ASTM D 648
Vicat Temperature	139	°C	ASTM D 1525
Thermal Conductivity, solid state	0.0288	W/(m K)	ASTM C 177
Specific Heat	1400	J/(kg K)	ASTM C 351

Other properties	Value	Unit	Test Standard
Water absorption	0.27	%	Sim. to ISO 62
Humidity absorption	0.13	%	Sim. to ISO 62
Density	1170	kg/m ³	ISO 1183
Water Absorption, 24hr	0.04	%	ASTM D 570
Density	1200	kg/m ³	ASTM D 792

Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	3 - 4	h	-
Processing humidity	≤0.02	%	-
Melt temperature	295 - 315	°C	-
Mold temperature	70 - 95	°C	-
Feed temperature	60 - 80	°C	-
Zone 1	260 - 280	°C	-
Zone 2	280 - 305	°C	-
Zone 3	295 - 315	°C	-

Characteristics**Processing**

Injection Molding

Regional Availability

Europe

Applications

Automotive