



Lexan* Resin 1500

Americas: COMMERCIAL

Nonhalogenated. 5.5 MFR. High impact strength, dimensional stability, sterilizability and autoclavability. FDA compliant (color limited).

Property

TYPICAL PROPERTIES (1)				
MECHANICAL		Value	Unit	Standard
Tensile Stress, yld, Type I, 50 mm/min		62	MPa	ASTM D 638
Tensile Stress, brk, Type I, 50 mm/min		65	MPa	ASTM D 638
Tensile Strain, yld, Type I, 50 mm/min		7	%	ASTM D 638
Tensile Strain, brk, Type I, 50 mm/min		110	%	ASTM D 638
Flexural Stress, yld, 1.3 mm/min, 50 mm span		93	MPa	ASTM D 790
Flexural Modulus, 1.3 mm/min, 50 mm span		2340	MPa	ASTM D 790
Hardness, Rockwell M		70	-	ASTM D 785
Hardness, Rockwell R		118	-	ASTM D 785
Taber Abrasion, CS-17, 1 kg		10	mg/1000cy	ASTM D 1044
IMPACT		Value	Unit	Standard
Izod Impact, unnotched, 23°C			J/m	ASTM D 4812
Izod Impact, notched, 23°C		747	J/m	ASTM D 256
Tensile Impact, Type "S"		630	kJ/m²	ASTM D 1822
Falling Dart Impact (D 3029), 23°C		169	J	ASTM D 3029
THERMAL		Value	Unit	Standard
Vicat Softening Temp, Rate B/50		157	°C	ASTM D 1525
HDT, 0.45 MPa, 6.4 mm, unannealed		137	°C	ASTM D 648
HDT, 1.82 MPa, 6.4 mm, unannealed	HDT, 1.82 MPa, 6.4 mm, unannealed		°C	ASTM D 648
CTE, -40°C to 95°C, flow	CTE, -40°C to 95°C, flow		1/°C	ASTM E 831
Specific Heat	Specific Heat		J/g-°C	ASTM C 351
Thermal Conductivity		0.19	W/m-°C	ASTM C 177
Relative Temp Index, Elec		125	°C	UL 746B
Relative Temp Index, Mech w/impact		115	°C	UL 746B
Relative Temp Index, Mech w/o impact		125	°C	UL 746B
PHYSICAL		Value	Unit	Standard
Specific Gravity	Specific Gravity		-	ASTM D 792
Specific Volume		0.83	cm³/g	ASTM D 792
Density		1.19	g/cm³	ASTM D 792
Water Absorption, 24 hours		0.15	%	ASTM D 570
Water Absorption, equilibrium, 23C		0.35	%	ASTM D 570
Water Absorption, equilibrium, 100°C		0.58	%	ASTM D 570
Mold Shrinkage, flow, 3.2 mm		105-07 J	月以%/日	SABIC Method
Melt Flow Rate, 300°C/1.2 kgf	<i>1</i>	5.8 7 =	g/10 min	ASTM D 1238
OPTICAL	(0)	少伯器础包	山新翅科一	-级经销dard
Light Transmission			7 7 7 T	20-85FM-D-1003
Haze	www.va	-so.com	联系鬼话: 0	ASTM D 1003
Refractive Index		1 586	-	ASTM D 542
ELECTRICAL		Value	Unit	Standard
Volume Resistivity		>1.E+17	Ohm-cm	ASTM D 257

Dielectric Strength, in air, 3.2 mm	14.9	kV/mm	ASTM D 149
Relative Permittivity, 50/60 Hz	3.17	-	ASTM D 150
Relative Permittivity, 1 MHz	2.96	-	ASTM D 150
Dissipation Factor, 50/60 Hz	0.0009	-	ASTM D 150
Dissipation Factor, 1 MHz	0.01	-	ASTM D 150
Hot Wire Ignition (PLC)	2	PLC Code	UL 746A
High Voltage Arc Track Rate {PLC}	2	PLC Code	UL 746A
High Ampere Arc Ign, surface {PLC}	1	PLC Code	UL 746A
Comparative Tracking Index (UL) {PLC}	2	PLC Code	UL 746A
FLAME CHARACTERISTICS	Value	Unit	Standard
UL Recognized, 94HB Flame Class Rating (3)	1.47	mm	UL 94

Source GMD, last updated:01/04/2000

Processing

Parameter		
Injection Molding	Value	Unit
Drying Temperature	120	°C
Drying Time	3 - 4	hrs
Drying Time (Cumulative)	48	hrs
Maximum Moisture Content	0.02	%
Melt Temperature	315 - 340	°C
Nozzle Temperature	310 - 330	°C
Front - Zone 3 Temperature	315 - 340	°C
Middle - Zone 2 Temperature	305 - 325	°C
Rear - Zone 1 Temperature	295 - 315	°C
Mold Temperature	80 - 115	°C
Back Pressure	0.3 - 0.7	MPa
Screw Speed	40 - 70	rpm
Shot to Cylinder Size	40 - 60	%
Vent Depth	0.025 - 0.076	mm

Source GMD, last updated:01/04/2000

THESE PROPERTY VALUES ARE NOT INTENDED FOR SPECIFICATION PURPOSES.

PLEASE CHECK WITH YOUR (LOCAL SALES OFFICE) FOR AVAILABILITY IN YOUR REGION

- (1) Typical values only. Variations within normal tolerances are possible for various colors. All values are measured after at least 48 hours storage at 23°C/50% relative humidity. All properties, except the melt volume and melt flow rates, are measured on injection molded samples. All samples tested under ISO test standards are prepared according to ISO 294.
- (2) Only typical data for selection purposes. Not to be used for part or tool design.
- (3) This rating is not intended to reflect hazards presented by this or any other material under actual fire conditions.
- (4) Internal measurements according to UL standards.

DISCIDINEY: THE MATERIALS AND PRODUCTS OF THE BUSINESSES MAKING UP THE SABIC INNOVATIVE PLASTICS COMPANY, ITS SUBSIDIARIES AND AFFILIATES ("SABIC IP"), ARE SOLD SUBJECT TO SABIC IP'S STANDARD CONDITIONS OF SALE, WHICH ARE INCLUDED IN THE APPLICABLE DISTRIBUTOR OR OTHER SALES AGREEMENT, PRINTED ON THE BACK OF ORDER ACKNOWLEDGMENTS AND INVOICES, AND AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION, RECOMMENDATIONS, OR ADVICE CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SABIC IP 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 SABIC IP MATERIALS, PRODUCTS, RECOMMENDATIONS OR ADVICE. EXCEPT AS PROVIDED IN SABIC IP'S STANDARD CONDITIONS OF SALE, SABIC IP AND ITS REPRESENTATIVES SHALL IN NO EVENT BE RESPONSIBLE FOR ANY LOSS RESULTING

FROM ANY USE OF ITS MATERIALS OR PRODUCT'S DESCRIBED HEREIN. Each user bears full responsibility for making its own determination as to the suitability of SABIC IP's materials, products, recommendations, or advice for its own particular use. Each

user must identify and perform all tests and analyses necessary to assure that its finished parts incorporating SABIC IP materials or products will be safe and suitable for use under end-use conditions. Nothing in this or any other document, nor any oral recommendation or advice, shall be deemed to alter, vary, supersede, or waive any provision of SABIC IP's Standard Conditions of Sale or this Disclaimer, unless any such modification is specifically agreed to in a writing signed by SABIC IP. No statement contained herein concerning a possible or suggested use of any material, product or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of SABIC Innovative Plastics Company or any of its subsidiaries or affiliates covering such use or design, or as a recommendation for the use of such material, product or design in the infringement of any patent or other intellectual property right

* Lexan is a trademark of the SABIC Innovative Plastics Company

© 1997-2008 SABIC Innovative Plastics Company.All rights reserved

广州华秀塑胶有限公司 (Sabic沙伯基础创新塑料 一级经销商) www.va-so.com 联系电话: 020-82582555