SABIC Innovative Plastics™

Lexan* 9030 and Lexan* 9030 TG Sheet

Description

Lexan* 9030 sheet is the standard Lexan sheet without UV nor Mar resistant surface treatment. Lexan 9030 sheet combines high impact and temperature resistance with optical clarity and can be utilized for secondary glazing behind existing glazing for economical protection against breakage or intrusion. Lexan 9030 sheet can be cut, sawn, drilled and milled by using standard workshop equipment without the risk of cracking and breakage and is therefore an excellent candidate for fabricating a wide range of indoor applications such as machine guards etc. Lexan 9030 sheet can be easily thermoformed into complex parts while retaining its excellent properties necessary for demanding applications such as vandal proof street furniture. Lexan 9030 sheet may be decorated using a wide variety of modern techniques such as painting and screen printing.

Typical Property Values +

| Property | Test Method | Unit | Value |
|--|----------------|-------------------|-----------|
| Physical | | | |
| Density | ISO 1183 | g/cm ³ | 1.20 |
| Water absorption, 50% RH / 23 °C | ISO 62 | % | 0.15 |
| Water absorption, saturation /23°C | ISO 62 | % | 0.35 |
| Mould shrinkage | SABIC-Method | % | 0.6-0.8 |
| Poison's ratio | ASTM-D638 | - | 0.38 |
| Mechanical | | | |
| Tensile stress at yield 50 mm/min | ISO 527 | MPa | 60 |
| Tensile stress at break 50 mm/min | ISO 527 | MPa | 70 |
| Tensile strain at yield 50 mm/min | ISO 527 | % | 6 |
| Tensile strain at break 50 mm/min | ISO 527 | % | 120 |
| Tensile modulus 1 mm/min | ISO 527 | MPa | 2300 |
| Flexural stress at yield 2 mm/min | ISO 178 | MPa | 90 |
| Flexural modulus 2 mm/min | ISO 178 | MPa | 2300 |
| Hardness H358/30 95 | ISO 2039/1 | MPa | 95 |
| Impact | | | |
| Charpy impact, notched | ISO 179/1C | kJ/m² | 35 |
| Izod impact, unnotched 23°C | ISO 180/4U | kJ/m ² | NB |
| Izod impact, unnotched -30°C | ISO 180/4U | kJ/m² | NB |
| Izod impact, notched 23°C | ISO 180/4A | kJ/m ² | 65 |
| Izod impact, notched -30°C | ISO 180/4A | kJ/m² | 10 |
| Thermal | | | |
| Vicat Softening Temperature, rate B/120 | ISO 306 | °C | 145 |
| HDT/Ae, 1.8 MPa edgew. 120*1*04/sp=100 | ISO 75 | °C | 127 |
| Thermal conductivity | ISO 8302 | W/m.°C | 0.2 |
| Coeff.of Lin.Therm.Exp.extr. 23-80°C | ISO 11359-2 | 1/°C | 7.00 E-05 |
| Ball pressure test 125 ±2°C | IEC 60695-10-2 | - | Passes |
| Relative Thermal Index. Electrical Properties | UL746B | °C | 130 |
| Relative Thermal Index. Mech. prop.with impact | UL746B | °C | 125 |
| Relative Thermal Index. Mech.prop.w/o impact | UL746B | °C | 125 |
| Electrical | | | |
| Volume Resistivity | IEC 60093 | Ohm.cm | 10 E15 |
| Relative Permittivity 50/60Hz | IEC 60250 | - | 2.7 |
| Relative Permittivity 1Mhz | IEC 60250 | - | 2.7 |
| Dissipation Factor 50/60 Hz | IEC 60250 | - | 0.001 |
| Dissipation Factor 1 Mhz | IEC 60250 | - | 0.01 |
| Arc Resistance Tungsten ASTM-D495 | sec. | 119 | |
| Optical | | | |
| Light transmission ^{¥)} 3 mm | ASTM-D1003 | % | 89 |

These property values have been derived from Lexan*resin data for the material used to produce this sheet product. Variation within normal tolerances are possible for various colors. These typical values are not intended for specification purposes. If minimum certifiable properties are required please contact your local SABIC Innovative Plastics, Specialty Film & Sheet representative. All values are measured at least after 48 hours storage at 23°C/50% relative humidity. All properties are measured on injection molded samples. All samples are prepared according ISO 294.

⁴) Light transmission value may vary by + or - 5%.

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Lexan*



Product Datasheet

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Light transmission

Transparent Lexan 9030 sheet have excellent light transmission, dependent of thickness between 84 - 87%.

Fire performance

Lexan* 9030 sheet has good fire behavior characteristics. Lexan sheet does not contribute significantly to the spread of fire or to the generation of toxic gases. For details please contact your local sales office.

Product Availability •) Lexan 9030TG sheet:

Standard Sizes Thin gauge in mm 625 x 1250# 1250 x 1250 Bottom Side:

Lexan 9030 sheet:

2050 x 6050

Bottom Side:

Standard gauge in mm 2050 x 3050

Masking 0.75#-1-1.5 Top side: Coex opal white PE dark blue print Coex transparent PE

2-3-4-5-6-8-9.5-12-15 Top side: Coex opal white PE dark blue print Coex transparent PE [#]Dimensions only for 0.75 mm.

Standard Colors

transparent code 112 and opal white code 82103

transparent code 112 and opal white code 82103

•) Lexan* 9030 sheet can be supplied by prior arrangements in non - standard widths, lengths and color. Such arrangements may affect prices, terms and/or other conditions of sales and are subject to minimum order quantities.



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