

Lexan* Resin 121RP

Asia Pacific: DEVELOPMENTAL

Another preliminary Datasheet

Property

| TYPICAL PROPERTIES (1) | | | |
|--|-------|-------------------------|------------|
| MECHANICAL | Value | Unit | Standard |
| Tensile Stress, yield, 5 mm/min | 43 | MPa | ISO 527 |
| Tensile Stress, break, 5 mm/min | 43 | MPa | ISO 527 |
| Tensile Strain, yield, 5 mm/min | 43 | % | ISO 527 |
| Tensile Strain, break, 5 mm/min | 546 | % | ISO 527 |
| Tensile Modulus, 1 mm/min | 3240 | MPa | ISO 527 |
| IMPACT | Value | Unit | Standard |
| Izod Impact, unnotched 80*10*4 +23°C | 356 | kJ/m² | ISO 180/1U |
| Izod Impact, unnotched 80*10*4 -30°C | 34 | kJ/m² | ISO 180/1U |
| THERMAL | Value | Unit | Standard |
| HDT/Bf, 0.45 MPa Flatw 80*10*4 sp=64mm | 54 | °C | ISO 75/Bf |
| HDT/Af, 1.8 MPa Flatw 80*10*4 sp=64mm | 34 | °C | ISO 75/Af |
| PHYSICAL | Value | Unit | Standard |
| Melt Volume Rate, MVR at 220°C/5.0 kg | 43 | cm ³ /10 min | ISO 1133 |

Source GMD, last updated:09/24/2003

Processing

| Parameter | | |
|------------------------------------|-------------|------|
| Extrusion Blow Molding | Value | Unit |
| Drying Temperature | 95 - 100 | °C |
| Drying Time | 4 - 6 | hrs |
| Drying Time (Cumulative) | 24 | hrs |
| Maximum Moisture Content | 0.01 - 0.02 | % |
| Minimum Moisture Content | 0.02 | % |
| Melt Temperature (Parison) | 240 - 250 | °C |
| Barrel - Zone 1 Temperature | 235 - 245 | °C |
| Barrel - Zone 2 Temperature | 235 - 245 | °C |
| Barrel - Zone 3 Temperature | 235 - 245 | °C |
| Barrel - Zone 4 Temperature | 235 - 245 | °C |
| Adapter - Zone 5 Temperature | 235 - 245 | °C |
| Head - Zone 6 - Top Temperature | 235 - 245 | °C |
| Head - Zone 7 - Bottom Temperature | 235 - 245 | °C |
| Mold Temperature | 65 - 90 | °C |
| Die Temperature | 240 - 250 | °C |

Source GMD, last updated:09/24/2003

- Purge with HDPE prior to changing screw, head, or die tooling and/or machine shutdown.
- Use moderate-slow screw speeds to keep melt temperature in suggested range. Suggested screw speed: 15 50 rpm. Actual rpm should be adjusted for desired output.
- Processing temperature must be measured with a hand-held probe as opposed to an internal-head probe.
- A reverse barrel profile may increase output while maintaining the melt temperature.

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.

DISCIAIMER: 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 PRODUCTS 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

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

^{*} Lexan is a trademark of the SABIC Innovative Plastics Company