



## LEXAN™ Resin 2034

### Europe-Africa-Middle East: COMMERCIAL

LEXAN 2034 is a medium viscosity flame retardant grade. The material is UV-stabilized. Glow wire at 960C also satisfies EDF spec HN 60-S-02.

| TYPICAL PROPERTIES <sup>1</sup>             | TYPICAL VALUE | Unit              | Standard       |
|---------------------------------------------|---------------|-------------------|----------------|
| <b>MECHANICAL</b>                           |               |                   |                |
| Taber Abrasion, CS-17, 1 kg                 | 9             | mg/1000cy         | SABIC Method   |
| Tensile Stress, yield, 50 mm/min            | 65            | MPa               | ISO 527        |
| Tensile Stress, break, 50 mm/min            | 70            | MPa               | ISO 527        |
| Tensile Strain, yield, 50 mm/min            | 6             | %                 | ISO 527        |
| Tensile Strain, break, 50 mm/min            | 100           | %                 | ISO 527        |
| Tensile Modulus, 1 mm/min                   | 2350          | MPa               | ISO 527        |
| Flexural Stress, yield, 2 mm/min            | 95            | MPa               | ISO 178        |
| Flexural Modulus, 2 mm/min                  | 2300          | MPa               | ISO 178        |
| Hardness, H358/30                           | 100           | MPa               | ISO 2039-1     |
| Hardness, Rockwell R                        | 120           | -                 | ISO 2039-2     |
| <b>IMPACT</b>                               |               |                   |                |
| Izod Impact, unnotched 80*10*3 +23°C        | NB            | kJ/m <sup>2</sup> | ISO 180/1U     |
| Izod Impact, unnotched 80*10*3 -30°C        | NB            | kJ/m <sup>2</sup> | ISO 180/1U     |
| Izod Impact, notched 80*10*3 +23°C          | 8             | kJ/m <sup>2</sup> | ISO 180/1A     |
| Izod Impact, notched 80*10*3 -30°C          | 8             | kJ/m <sup>2</sup> | ISO 180/1A     |
| Charpy 23°C, V-notch Edgew 80*10*3 sp=62mm  | 9             | kJ/m <sup>2</sup> | ISO 179/1eA    |
| Charpy -30°C, V-notch Edgew 80*10*3 sp=62mm | 9             | kJ/m <sup>2</sup> | ISO 179/1eA    |
| Charpy 23°C, Unnotch Edgew 80*10*3 sp=62mm  | NB            | kJ/m <sup>2</sup> | ISO 179/1eU    |
| Charpy -30°C, Unnotch Edgew 80*10*3 sp=62mm | NB            | kJ/m <sup>2</sup> | ISO 179/1eU    |
| <b>THERMAL</b>                              |               |                   |                |
| Thermal Conductivity                        | 0.2           | W/m-°C            | ISO 8302       |
| CTE, 23°C to 80°C, flow                     | 7.E-05        | 1/°C              | ISO 11359-2    |
| Ball Pressure Test, 125°C +/- 2°C           | PASSES        | -                 | IEC 60695-10-2 |



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| <b>THERMAL</b>                              |               |                         |                |
| Ball Pressure Test, approximate maximum     | 140           | °C                      | IEC 60695-10-2 |
| Vicat Softening Temp, Rate B/50             | 144           | °C                      | ISO 306        |
| Vicat Softening Temp, Rate B/120            | 145           | °C                      | ISO 306        |
| HDT/Be, 0.45MPa Edgew 120*10*4 sp=100mm     | 140           | °C                      | ISO 75/Be      |
| HDT/Ae, 1.8 MPa Edgew 120*10*4 sp=100mm     | 129           | °C                      | ISO 75/Ae      |
| Relative Temp Index, Elec                   | 80            | °C                      | UL 746B        |
| Relative Temp Index, Mech w/impact          | 80            | °C                      | UL 746B        |
| Relative Temp Index, Mech w/o impact        | 80            | °C                      | UL 746B        |
| <b>PHYSICAL</b>                             |               |                         |                |
| Mold Shrinkage on Tensile Bar, flow (2) (5) | 0.4 - 0.6     | %                       | SABIC Method   |
| Density                                     | 1.24          | g/cm <sup>3</sup>       | ISO 1183       |
| Water Absorption, (23°C/sat)                | 0.32          | %                       | ISO 62         |
| Moisture Absorption (23°C / 50% RH)         | 0.13          | %                       | ISO 62         |
| Melt Volume Rate, MVR at 300°C/1.2 kg       | 8             | cm <sup>3</sup> /10 min | ISO 1133       |
| <b>OPTICAL</b>                              |               |                         |                |
| Light Transmission, 2.54 mm                 | 88 - 90       | %                       | ASTM D 1003    |
| Haze, 2.54 mm                               | <0.8          | %                       | ASTM D 1003    |
| Refractive Index                            | 1.586         | -                       | ISO 489        |
| <b>ELECTRICAL</b>                           |               |                         |                |
| Volume Resistivity                          | >1.E+15       | Ohm-cm                  | IEC 60093      |
| Surface Resistivity, ROA                    | >1.E+15       | Ohm                     | IEC 60093      |
| Dielectric Strength, in oil, 0.8 mm         | 35            | kV/mm                   | IEC 60243-1    |
| Dielectric Strength, in oil, 1.6 mm         | 27            | kV/mm                   | IEC 60243-1    |
| Dielectric Strength, in oil, 3.2 mm         | 17            | kV/mm                   | IEC 60243-1    |
| Relative Permittivity, 1 MHz                | 2.7           | -                       | IEC 60250      |
| Dissipation Factor, 50/60 Hz                | 0.001         | -                       | IEC 60250      |



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| TYPICAL PROPERTIES <sup>1</sup>               | TYPICAL VALUE | Unit | Standard       |
|-----------------------------------------------|---------------|------|----------------|
| <b>ELECTRICAL</b>                             |               |      |                |
| Dissipation Factor, 1 MHz                     | 0.01          | -    | IEC 60250      |
| Relative Permittivity, 50/60 Hz               | 2.7           | -    | IEC 60250      |
| <b>FLAME CHARACTERISTICS</b>                  |               |      |                |
| UL Recognized, 94V-2 Flame Class Rating (3)   | 1.5           | mm   | UL 94          |
| UL Recognized, 94V-0 Flame Class Rating (3)   | 2.5           | mm   | UL 94          |
| Glow Wire Flammability Index 850°C, passes at | 1             | mm   | IEC 60695-2-12 |
| Glow Wire Flammability Index 960°C, passes at | 1.8           | mm   | IEC 60695-2-12 |
| Oxygen Index (LOI)                            | 40            | %    | ISO 4589       |



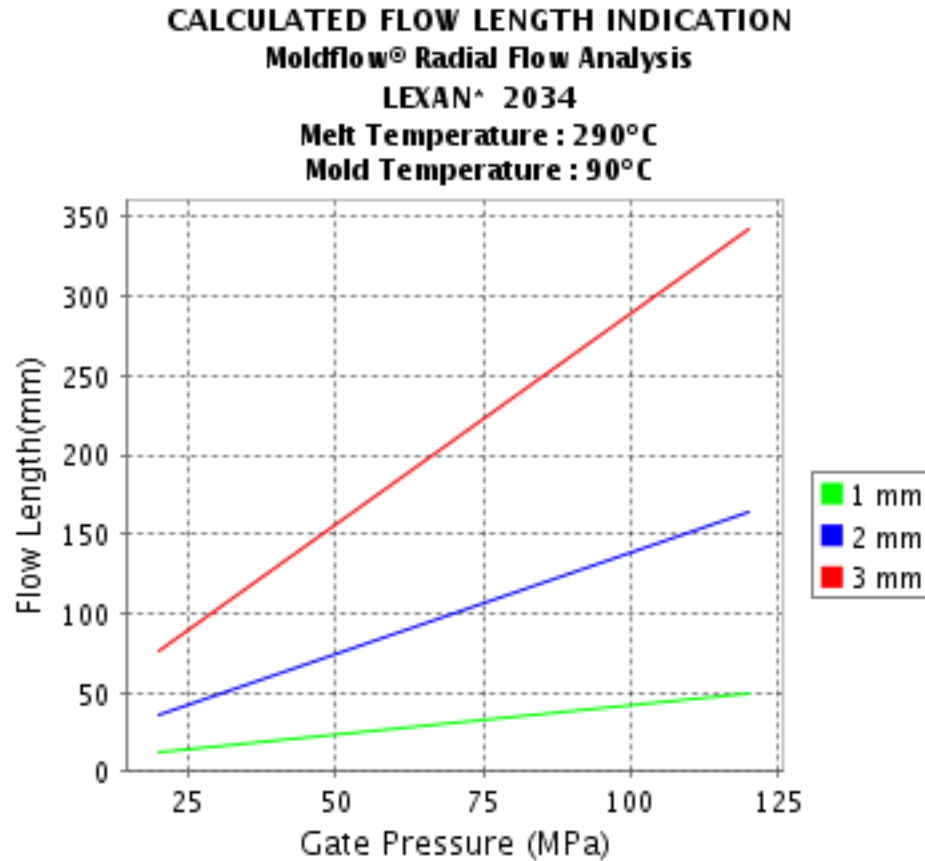
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| PROCESSING PARAMETERS       | TYPICAL VALUE | Unit |
|-----------------------------|---------------|------|
| <b>Injection Molding</b>    |               |      |
| Drying Temperature          | 120           | °C   |
| Drying Time                 | 2 - 4         | hrs  |
| Maximum Moisture Content    | 0.02          | %    |
| Melt Temperature            | 280 - 310     | °C   |
| Nozzle Temperature          | 270 - 290     | °C   |
| Front - Zone 3 Temperature  | 280 - 310     | °C   |
| Middle - Zone 2 Temperature | 270 - 290     | °C   |
| Rear - Zone 1 Temperature   | 260 - 280     | °C   |
| Hopper Temperature          | 60 - 80       | °C   |
| Mold Temperature            | 80 - 110      | °C   |



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**Note: Technical support is recommended if Gate Pressure is greater than 80 MPa. Contact your local representative.**

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