

# - NORYL 731 960 -

| PROPERTIES   | UNIT              | TEST METHOD | VALUES             |
|--|-------------------|-------------|--------------------|
| <b><u>Physical</u></b>   |                   |             |                    |
| unreinforced   |                   |             |                    |
| Density  | g/cm <sup>3</sup> | ISO 1183    | 1.06               |
| Coefficient of thermal expansion in flow direction CTE (23°C-60°C) | 1/°C              | ASTM D696   | 7-10 <sup>-5</sup> |
| Water absorption at saturation at 23°C                             | %                 | ISO 62      | 0.23               |
| <b><u>Mechanical</u></b>   |                   |             |                    |
| Tensile stress - at yield (at break) at 50 mm/min                  | MPa               | ISO 527     | 55 (50)            |
| Tensile strain - at yield (at break) at 50 mm/min                  | %                 | ISO 527     | 5 (30)             |
| Tensile modulus at 1mm/min   | MPa               | ISO 527     | 2300               |
| Flexural stress at yield (at break) at 2 mm/min                    | MPa               | ISO 178     | 75 (-)             |
| Flexural modulus at 2 mm/min                                       | MPa               | ISO 178     | 2200               |
| Hardness H 358/30  | MPa               | ISO 2039-1  | 100                |
| Hardness Rockwell R, M or L  | -                 | ISO 2039-2  | M65                |
| Abrasion resistance Taber, CS-17, 1 kg                             | mg/1000cy         | GE          | 65                 |
| Impact Izod notched at +23°C (- 30°C)                              | kJ/m <sup>2</sup> | ISO 180-1A  | 15 (5)             |
| <b><u>Thermal</u></b>  |                   |             |                    |
| Vicat A/50 10N (method A) à 50°C/h                                 | °C                | ISO 306     | 145                |
| Vicat B/50 50N (method B) à 50°C/h                                 | °C                | ISO 306     | 135                |
| HDT / Ae at 1,80 MPa   | °C                | ISO 75/Ae   | 115                |
| HDT / Be at 0,45 MPa   | °C                | ISO 75/Be   | 130                |
| Relative Temperature Index RTI – electrical properties             | °C                | UL746B      | 105                |
| Relative Temperature Index RTI – mechanical properties with impact | °C                | UL746B      | 90                 |
| UL 94 rating flame class rating / at mm thickness                  | Class / mm        | UL94        | HB/1.65            |
| Limited Oxygen Index- LOI  | %                 | ASTM D2863  | 22                 |
| <b><u>Electrical</u></b>   |                   |             |                    |
| Dielectric strength at 3,2 mm                                      | kV/mm             | ASTM D149   | 19                 |
| Surface resistivity  | Ohm               | ASTM D257   | >10 <sup>15</sup>  |
| Volume resistivity   | Ohm,cm            | ASTM D257   | 10 <sup>15</sup>   |
| Dielectric constant at 50 Hz                                       | -                 | ASTM D150   | 2.7                |
| Dielectric constant at 1 MHz                                       | -                 | ASTM D150   | 2.6                |
| Dissipation factor at 50 Hz  | -                 | ASTM D150   | 0.002              |
| Dissipation factor at 1 MHz  | -                 | ASTM D150   | 0.001              |
| Comparative Tracking Index - CTI                                   | PCL               | UL746A      | 2                  |
| Arc Resistance - D-495 - class                                     | PCL               | UL746A      | 6                  |
| High Voltage Arc - Tracking Rate – HVTR - class                    | PCL               | UL746A      | 4                  |

*The values indicated are it with titles codes and do not engage to in no case the responsibility for company PHT*



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