

# Novamid® 1010C2

## PA6

Injection Molding, High Flow, Easy Molding Grade, Lubricated, Nucleated

Good and fast flow-ability. Easy mold release. Smooth surface appearance. Ideal for injection molding.

| Properties                                   | Typical Data | Unit              | Test Method       |
|----------------------------------------------|--------------|-------------------|-------------------|
| <b>Rheological properties</b>                |              |                   |                   |
|                                              | dry / cond   |                   |                   |
| Molding shrinkage [parallel]                 | 1.2 / *      | %                 | Sim. to ISO 294-4 |
| Molding shrinkage [normal]                   | 1.3 / *      | %                 | Sim. to ISO 294-4 |
| <b>Mechanical properties</b>                 |              |                   |                   |
|                                              | dry / cond   |                   |                   |
| Tensile modulus                              | 3100 / 1700  | MPa               | ISO 527-1/-2      |
| Yield stress                                 | 85 / 54      | MPa               | ISO 527-1/-2      |
| Yield strain                                 | 4.2 / 21     | %                 | ISO 527-1/-2      |
| Strain at break                              | 15 / >50     | %                 | ISO 527-1/-2      |
| Flexural modulus                             | 2900 / 1000  | MPa               | ISO 178           |
| Flexural strength                            | 110 / 50     | MPa               | ISO 178           |
| Charpy impact strength (+23°C)               | N / N        | kJ/m <sup>2</sup> | ISO 179/1eU       |
| Charpy impact strength (-30°C)               | N / N        | kJ/m <sup>2</sup> | ISO 179/1eU       |
| Charpy notched impact strength (+23°C)       | 4.8 / 16     | kJ/m <sup>2</sup> | ISO 179/1eA       |
| Charpy notched impact strength (-30°C)       | 3 / 3        | kJ/m <sup>2</sup> | ISO 179/1eA       |
| <b>Thermal properties</b>                    |              |                   |                   |
|                                              | dry / cond   |                   |                   |
| Melting temperature (10°C/min)               | 220 / *      | °C                | ISO 11357-1/-3    |
| Temp. of deflection under load (1.80 MPa)    | 61 / *       | °C                | ISO 75-1/-2       |
| Temp. of deflection under load (0.45 MPa)    | 150 / *      | °C                | ISO 75-1/-2       |
| Coeff. of linear therm. expansion (parallel) | 0.7 / *      | E-4/°C            | ISO 11359-1/-2    |
| Coeff. of linear therm. expansion (normal)   | 0.8 / *      | E-4/°C            | ISO 11359-1/-2    |
| Burning Behav. at 1.5 mm nom. thickn.        | V-2 / *      | class             | IEC 60695-11-10   |



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| Properties                            | Typical Data      | Unit               | Test Method         |
|---------------------------------------|-------------------|--------------------|---------------------|
| Thickness tested                      | 1.5 / *           | mm                 | IEC 60695-11-10     |
| Burning Behav. at 3.0 mm nom. thickn. | V-2 / *           | class              | IEC 60695-11-10     |
| Thickness tested                      | 3 / *             | mm                 | IEC 60695-11-10     |
| <b>Electrical properties</b>          | <b>dry / cond</b> |                    |                     |
| Relative permittivity (100Hz)         | 4 / -             | -                  | IEC 62631-2-1       |
| Relative permittivity (1 MHz)         | 4 / -             | -                  | IEC 62631-2-1       |
| Dissipation factor (100 Hz)           | 110 / -           | E-4                | IEC 62631-2-1       |
| Dissipation factor (1 MHz)            | 230 / -           | E-4                | IEC 62631-2-1       |
| Volume resistivity                    | >1E13 / -         | Ohm*m              | IEC 62631-3-1       |
| Surface resistivity                   | - / 2E14          | Ohm                | IEC 62631-3-2       |
| Electric strength                     | 27 / -            | kV/mm              | IEC 60243-1         |
| Comparative tracking index            | 600 / -           | V                  | IEC 60112           |
| <b>Other properties</b>               | <b>dry / cond</b> |                    |                     |
| Humidity absorption                   | 2.8 / *           | %                  | Sim. to ISO 62      |
| Density                               | 1130 / -          | kg/m <sup>3</sup>  | ISO 1183            |
| <b>Material specific properties</b>   | <b>dry / cond</b> |                    |                     |
| Viscosity number                      | 118 / *           | cm <sup>3</sup> /g | ISO 307, 1157, 1628 |

