

## TECHNYL® A 246 NC

DOMO Engineering Plastics - Polyamide 66

### General Information

#### Product Description

\*Previously DOMAMID 66I4 NC

Polyamide 66, impact modified, for injection moulding

#### General

|                             |                         |                           |                 |
|-----------------------------|-------------------------|---------------------------|-----------------|
| Material Status             | • Commercial: Active    |                           |                 |
| Availability                | • Africa & Middle East  | • Europe                  | • North America |
|                             | • Asia Pacific          | • Latin America           |                 |
| Additive                    | • Impact Modifier       |                           |                 |
| Features                    | • Impact Modified       |                           |                 |
| Uses                        | • Consumer Applications | • Industrial Applications |                 |
| Agency Ratings              | • EC 1907/2006 (REACH)  |                           |                 |
| RoHS Compliance             | • RoHS Compliant        |                           |                 |
| Processing Method           | • Injection Molding     |                           |                 |
| ISO Designation (ISO 16396) | • PA66,MP,S14-020       |                           |                 |
| Resin ID (ISO 1043)         | • PA66-I                |                           |                 |

### Properties <sup>1</sup>

| Physical                                                | Dry        | Conditioned | Unit                  | Test Method   |
|---------------------------------------------------------|------------|-------------|-----------------------|---------------|
| Density                                                 | 1.08       | --          | g/cm <sup>3</sup>     | ISO 1183      |
| Molding Shrinkage                                       |            |             |                       | ISO 294-4     |
| Across Flow                                             | 1.6 to 1.8 | --          | %                     |               |
| Flow                                                    | 1.4 to 1.6 | --          | %                     |               |
| Mechanical                                              | Dry        | Conditioned | Unit                  | Test Method   |
| Tensile Modulus                                         | 276000     | 131000      | psi                   | ISO 527-1     |
| Tensile Stress (Yield)                                  | 7250       | 5800        | psi                   | ISO 527-2     |
| Tensile Strain (Break)                                  | 50         | 50          | %                     | ISO 527-2     |
| Flexural Modulus                                        | 261000     | --          | psi                   | ISO 178       |
| Flexural Stress                                         | 10200      | --          | psi                   | ISO 178       |
| Impact                                                  | Dry        | Conditioned | Unit                  | Test Method   |
| Charpy Notched Impact Strength (73°F)                   | 31         | 50          | ft·lb/in <sup>2</sup> | ISO 179/1eA   |
| Charpy Unnotched Impact Strength                        |            |             |                       | ISO 179/1eU   |
| -22°F                                                   | No Break   | No Break    |                       |               |
| 73°F                                                    | No Break   | No Break    |                       |               |
| Notched Izod Impact Strength (73°F)                     | 31         | 45          | ft·lb/in <sup>2</sup> | ISO 180/1A    |
| Unnotched Izod Impact Strength (73°F)                   | No Break   | No Break    |                       | ISO 180/1U    |
| Hardness                                                | Dry        | Conditioned | Unit                  | Test Method   |
| Rockwell Hardness (R-Scale)                             | 110        | --          |                       | ISO 2039-2    |
| Thermal                                                 | Dry        | Conditioned | Unit                  | Test Method   |
| Deflection Temperature Under Load (66 psi, Unannealed)  | 329        | --          | °F                    | ISO 75-2/B    |
| Deflection Temperature Under Load (264 psi, Unannealed) | 149        | --          | °F                    | ISO 75-2/A    |
| Vicat Softening Temperature                             | 428        | --          | °F                    | ISO 306       |
| Melting Temperature <sup>2</sup>                        | 504        | --          | °F                    | ISO 11357-3   |
| Electrical                                              | Dry        | Conditioned | Unit                  | Test Method   |
| Surface Resistivity                                     | 1.0E+14    | --          | ohms                  | IEC 62631-3-2 |
| Volume Resistivity                                      | 1.0E+16    | --          | ohms·m                | IEC 62631-3-1 |
| Comparative Tracking Index (CTI)                        | PLC 0      | --          |                       | IEC 60112     |



|                            |            |                    |             |                    |
|----------------------------|------------|--------------------|-------------|--------------------|
| Comparative Tracking Index | 600        | --                 | V           | IEC 60112          |
| <b>Flammability</b>        | <b>Dry</b> | <b>Conditioned</b> | <b>Unit</b> | <b>Test Method</b> |
| Burning Rate (0.0394 in)   | < 3.9      | --                 | in/min      | FMVSS 302          |
| Flame Rating (0.030 in)    | HB         | --                 |             | UL 94              |

Processing Information

|                        |                 |
|------------------------|-----------------|
| <b>Injection</b>       | <b>Dry Unit</b> |
| Drying Temperature     | 167 to 185 °F   |
| Drying Time            | 2.0 to 4.0 hr   |
| Dew Point              | < -22 °F        |
| Processing (Melt) Temp | 518 to 554 °F   |
| Mold Temperature       | 104 to 176 °F   |

|                                                                                                                                                                                                                              |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Injection Notes</b>                                                                                                                                                                                                       |
| The material is supplied in airtight bags, ready for use. In case that the virgin material has absorbed moisture, it must be dried with a dehumidified air drying equipment, dew point minimum -20°C. Recommended time 2-4h. |

Notes

- <sup>1</sup> Typical properties: these are not to be construed as specifications.
- <sup>2</sup> 10°C/min

