

## Terblend® N NG-04EF

(ABS+PA6)-GF20

INEOS Styrolution

Terblend® N NG-04EF is a blend of ABS with PA 6, provides very good mechanical properties, a high melt flow and very good chemical resistance provided by the polyamide component. Parts from Terblend® NG-04EF have acoustic dampening properties and show in unpainted, textured surfaces a nice matt appearance. Terblend® N NG-04EF is a low emission 20% glass fiber reinforced "Enhanced Flow" grade, containing also a powerful UV package. The reinforcement provides a high heat performance and stiffness, for visible and structural parts.

| Rheological properties     | dry / cond | Unit                   | Test Standard |
|----------------------------|------------|------------------------|---------------|
| <b>ISO Data</b>            |            |                        |               |
| Melt volume-flow rate, MVR | 25 / *     | cm <sup>3</sup> /10min | ISO 1133      |
| Temperature                | 240 / *    | °C                     | -             |
| Load                       | 10 / *     | kg                     | -             |

| Mechanical Properties                   | dry / cond  | Unit              | Test Standard |
|---|-------------|-------------------|---------------|
| <b>ISO Data</b>                         |             |                   |               |
| Tensile Modulus                         | 5300 / 4000 | MPa               | ISO 527       |
| Stress at Break                         | 80 / 70     | MPa               | ISO 527       |
| Strain at Break                         | 4 / 7       | %                 | ISO 527       |
| Impact Strength (Charpy), +23°C         | 53 / -      | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Impact Strength (Charpy), -30°C         | 51 / -      | kJ/m <sup>2</sup> | ISO 179/1eU   |
| Notched Impact Strength (Charpy), +23°C | 14 / -      | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Notched Impact Strength (Charpy), -30°C | 8 / -       | kJ/m <sup>2</sup> | ISO 179/1eA   |
| Flexural Modulus (23°C)                 | 4500 / -    | MPa               | ISO 178       |
| Flexural strength                       | 115 / -     | MPa               | ISO 178       |

| Thermal Properties                          | dry / cond | Unit  | Test Standard |
|---|------------|-------|---------------|
| <b>ISO Data</b>                             |            |       |               |
| Temp. of deflection under load (1.80 MPa)   | 108 / *    | °C    | ISO 75-1-2    |
| Temp. of deflection under load (0.45 MPa)   | 180 / *    | °C    | ISO 75-1-2    |
| Vicat softening temperature, 50°C/h 50N     | 130 / *    | °C    | ISO 306       |
| Coeff. of Linear Therm. Expansion, parallel | 35 / *     | E-6/K | ISO 11359-1-2 |
| Coeff. of Linear Therm. Expansion, normal   | 130 / *    | E-6/K | ISO 11359-1-2 |
| Burning Behav. at 1.5 mm Nom. Thickn.       | HB / *     | class | UL 94         |
| Thickness tested                            | 1.5 / *    | mm    | -             |
| UL recognition                              | yes / *    | -     | -             |
| Burning Behav. at thickness h               | HB / *     | class | UL 94         |
| Thickness tested                            | 3.0 / *    | mm    | -             |
| UL recognition                              | yes / *    | -     | -             |

| Other Properties    | dry / cond | Unit              | Test Standard  |
|---------------------|------------|-------------------|----------------|
| <b>ISO Data</b>     |            |                   |                |
| Water Absorption    | 3.9 / *    | %                 | Sim. to ISO 62 |
| Humidity absorption | 0.9 / *    | %                 | Sim. to ISO 62 |
| Density             | 1200 / -   | kg/m <sup>3</sup> | ISO 1183       |
| Bulk density        | 600        | kg/m <sup>3</sup> | -              |

| Rheological calculation properties | Value | Unit              | Test Standard |
|------------------------------------|-------|-------------------|---------------|
| <b>ISO Data</b>                    |       |                   |               |
| Density of melt                    | 1070  | kg/m <sup>3</sup> | -             |
| Thermal Conductivity of Melt       | 0.232 | W/(m K)           | -             |
| Spec. heat capacity of melt        | 2270  | J/(kg K)          | -             |
| Ejection temperature               | 177   | °C                | -             |

| Processing Recommendation Injection Molding | Value     | Unit | Test Standard |
|---|-----------|------|---------------|
| Pre-drying - Temperature                    | 80 - 90   | °C   | -             |
| Pre-drying - Time                           | 4 - 8     | h    | -             |
| Melt temperature                            | 240 - 270 | °C   | -             |
| Mold temperature                            | 40 - 80   | °C   | -             |

## Characteristics

**Terblend® N NG-04EF**  
(ABS+PA6)-GF20

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**Processing**  
Injection Molding

**Delivery form**  
Pellets

**Special Characteristics**  
UV stabilized

**Features**  
Low Emission

**Chemical Resistance**  
General Chemical Resistance

**Applications**  
Automotive

**Injection Molding**

PREPROCESSING  
Pre-drying Temperature: 80 - 90 °C  
Pre-drying Time: 4 - 8h  
PROCESSING  
Melt temperature, range: 240 - 270 °C  
Mold temperature, range: 40 - 80 °C