INEOS STYROLUTION

Terblend N NG-04EF SL

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

DESCRIPTION

Terblend® N NG-04EF is a 20% glass fiber Reinforced UV-stabilized ABS/PA blend with enhanced dimensional stability, rigidity and high flowability that was developed to give the best performance as back injection molding material for StyLight thermoplastic composites.

FEATURES

- High dimensional stability
- Low shrinkage
- Enhanced softening temperature
- Enhanced rigidity
- Glass fiber reinforced (30%)

APPLICATIONS

- Back injection molding material for StyLight

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	30
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm³/10 min	30
Mechanical Properties			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m²	12
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m²	8
Tensile Stress at Yield, 23 °C	ISO 527	MPa	78
Tensile Strain at Yield, 23 °C	ISO 527	%	4
Flexural Strength, 23 °C	ISO 178	MPa	109
Flexural Modulus, 23 °C	ISO 178	MPa	4180
Charpy Unnotched Impact Strength, 23 °C	ISO 579	kJ/m²	53
Charpy Unnotched Impact Strength, -30 °C	ISO 579	kJ/m²	51
Method: injection molding (M), extrusion (E), blow molding (B)	-	-	5300
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	125
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°C	195
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	108

Contact us:
INSTY.emea@ineos.com
www.ineos-styrolution.com

INEOS STYROLUTION

Terblend N NG-04EF SL

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	190
Other Properties			
Density	ISO 1183	kg/m³	1215
Moisture Absorption	ASTM D570	%	4.4
Processing			
Melt Temperature Range	ISO 294	°C	240 - 270
Mold Temperature Range	ISO 294	°C	80
Drying Time	-	h	4

Typical values for uncolored products

SUPPLY FORM

Terblend® N is delivered in the form of cylindrical or spherical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm³. Values may differ for special grades. Standard Packaging unit: 25 kg PE-bag on palette, shrunk or wrapped with PE film. In addition, delivery in larger units of up to 1000 kg (IBC = Intermediate Bulk Container) or silo trucks can be arranged. In dry areas with normal temperature control, Terblend® N pellets can be stored for relatively long periods of time without any change in mechanical properties. With unstable colors, however, storage over a number of years can give rise to some change in color. Under poor storage conditions, Terblend® N absorbs moisture, but this can be removed by drying.

PRODUCT SAFETY

No adverse effects on the health of processing personnel have been observed where the products are correctly processed and the production areas are suitably ventilated. For styrene, alpha-methylstyrene, acrylonitrile, and butyl acrylate the maximum allowable workplace concentrations must be observed according to the pertaining national regulations. In Germany, the follow- ing limit values are valid TRGS 900 (Aug. 2004): styrene, MAK-value: 20 ml/m³; alpha-methylstyrene, MAK-value: 100 ml/m³; acrylonitrile, TRK-value: 3 ml/m³, and butyl acrylate, MAK-value: 2 ml/m³ (1.7.2004). According to EU directive 67/548/EEC, Annex I (2001), acrylonitrile is classified as carcinogenic, category 2 (´substances which should be regarded as if they are carcinogenic to man´). Experience has shown that when Terblend® N is processed correctly with appropriate ventilation, the levels are far below the limits mentioned above. Inhalation of the vapors of degradation products which can arise on severe overheating of the materials or during purging out should be avoided. Further information can be found in the Terblend® N safety data sheets.

DISCLAIMER

The above mentioned data are accurate to the best of our knowledge. They are based upon reputable labs and industry standard testing methods. These are only typical values and actual product specification may deviate at industrial range. Therefore, no data in this technical data sheet shall constitute a warranty or representation regarding product features, fitness of the product for a specific purpose or application or its processability. INEOS Styrolution disclaims all liability in connection therewith. The customer himself is required to verify whether or not the product is suitable for the further processing or application intended and whether or not the product complies with the relevant statutory

Contact us:
INSTY.emea@ineos.com
www.ineos-styrolution.com

INEOS STYROLUTION

Terblend N NG-04EF SL

Acrylonitrile Butadiene Styrene / Polyamide (ABS/PA)

TECHNICAL DATASHEET

requirements. Unless explicitly and individually otherwise agreed in writing, INEOS Styrolution's sole and exclusive liability with respect to its products is set forth in INEOS Styrolution's General Terms and Conditions for Sale.

Contact us:
INSTY.emea@ineos.com
www.ineos-styrolution.com