Product Information **Terluran®**

HH-112

11/2010 **ABS**

BASF The Chemical Company

Product description

Injection-moulding grade with highest heat resistance, high rigidity and medium impact strength.

Physical form and storage

Terluran® is delivered as spherical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm³.
Standard Packaging unit: 25 kg PE-bag on palette, shrunk or wrapped with PE film or delivery in silo trucks.
PE bags should not be stored outside.
In dry areas with normal temperature control, Terluran® pellets can be stored for relatively long periods of time without any change in mechanical properties. Under poor storage conditions, Terluran® absorbs moisture, but this can be removed by drying.

Product safety

No adverse effects on the health of processing personnel have been observed if the products are correctly processed and the production areas are suitably ventilated.
For styrene, alpha-methylstyrene, acrylonitrile, and 1,3-butadiene the maximum allowable workplace concentrations must be observed according to the pertaining national regulations. In Germany, the following limit values are valid (Oct. 2002): styrene, MAK-value: 20 ml/m³ = 86 mg/m³; alpha-methylstyrene, MAK-value: 100 ml/m³ = 480 mg/m³; acrylonitrile, TRK-value: 3 ml/m³ = 7 mg/m³ and 1,3-butadiene, TRK-value: 5 ml/m³ = 11 mg/m³.
According to EU directive 67/548/EWG, Annex I and TRGS 905 (Oct. 2002), acrylonitrile and 1,3-butadiene are classified as carcinogenic, category 2 (´substances which should be regarded as if they are carcinogenic to man´) and 1 (substances known to be carcinogenic to man), respectively.
Experience has shown that during appropriate processing of Terluran® with suitable ventilation the values obtained are well below the limits mentioned above. TRGS 402 (Germany) can be used for determining and assessing the concentrations of harzardous substances in the air within working areas.
Inhalation of gaseous degradation products, such as those which may arise on severe overheating of the material or during pumped evacuation, must be avoided. Further information can be found in our Terluran® safety data sheets.

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out their own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed.
In order to check the availability of products please contact us or our sales agency.

Styrolution GmbH
67056 Ludwigshafen, Germany

Terluran® HH-112

Product Information

Typical values for uncoloured product at 23 °C[1)]	Test method[2)]	Unit	Values[3)]
Properties			
Polymer abbreviation	-	-	**ABS**
Density	ISO 1183	kg/m³	**1050**
Processing			
Processing: Injection moulding (M), Extrusion (E), Blow moulding (B)	-	-	**M**
Melt volume-flow rate MVR 220 °C/10 kg	ISO 1133	cm³/10min	**6**
Pre-drying: Temperature	-	°C	**80**
Pre-drying: Time	-	h	**2 - 4**
Melt temperature, injection moulding	-	°C	**230 - 270**
Mould temperature, injection moulding	-	°C	**30 - 60**
Moulding shrinkage, free, longitudinal	-	%	**0.4 - 0.7**
Flammabillity			
UL94 rating at 1.6 mm thickness	IEC 60695-11-10	class	**HB**
Automotive materials (thickness d >= 1mm)	FMVSS 302	-	**+**
Mechanical Properties			
Tensile modulus	ISO 527-1/-2	MPa	**2700**
Yield stress, 50 mm/min	ISO 527-1/-2	MPa	**58**
Yield strain, 50 mm/min	ISO 527-1/-2	%	**3.1**
Nominal strain at break, 50 mm/min	ISO 527-1/-2	%	**8**
Flexural strength	ISO 178	MPa	**81**
Charpy impact strength (23°C)	ISO 179/1eU	kJ/m²	**140**
Charpy impact strength (-30°C)	ISO 179/1eU	kJ/m²	**80**
Izod notched impact strength (23°C)	ISO 180/A	kJ/m²	**12**
Izod notched impact strength (-30°C)	ISO 180/A	kJ/m²	**5**
Charpy notched impact strength (23°C)	ISO 179/1eA	kJ/m²	**12**
Charpy notched impact strength (-30°C)	ISO 179/1eA	kJ/m²	**5**
Izod notched impact strength, method A (23°C)	ASTM D 256	J/m	**110**
Ball indentation hardness at 358 N/30 s	ISO 2039-1	MPa	**114**
Thermal properties			
HDT A (1.80 MPa)	ISO 75-1/-2	°C	**109**
HDT B (0.45 MPa)	ISO 75-1/-2	°C	**113**
Vicat softening temperature VST/A/50	ISO 306	°C	**118**
Vicat softening temperature VST/B/50	ISO 306	°C	**112**
Max. service temperature (short cycle operation)	-	°C	**90**
Coefficient of linear thermal expansion, longitudinal (23-80)°C	ISO 11359-1/-2	E-6/K	**70 - 110**
Thermal conductivity	DIN 52612-1	W/(m K)	**0.17**
Electrical properties			
Volume resistivity	IEC 60093	Ohm*m	**1E13**
Electric strength K20/P50, d = 0.6 - 0.8 mm	IEC 60243-1	kV/mm	**41**

Footnotes
1) If product name or properties don't state otherwise.
2) Specimens according to CAMPUS.
3) The asterisk symbol '*' signifies inapplicable properties.

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