FICHA TÉCNICA



Terluran® HH-112



ABS

PRODUCT DESCRIPTION

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

PHYSICAL FORM AND STORAGE

Terluran® 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. Standard Packaging unit: 25 kg PE-bag on palette, shrunk or wrapped with PE film or delivery in silo trucks.

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: $20 \text{ ml/m}^3 = 86 \text{ mg/m}^3$; alpha-methylstyrene, MAK-value: $100 \text{ ml/m}^3 = 480 \text{ mg/m}^3$; acrylonitrile, TRK-value: $3 \text{ ml/m}^3 = 7 \text{ mg/m}^3$ and 1,3-butadiene, TRK-value: $5 \text{ ml/m}^3 = 11 \text{ mg/m}^3$.

According to EU directive 67/548/EWG, Annex I and TRGS 905 (Oct. 2002), acrylonitrile and 1,3butadiene 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. These can be requested from the Styrenics Infopoint, phone +49 621 60-4 14 46, fax: +49 621 60 46006 or by e-mail: styrenics.infopoint@basf-ag.de

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.

BASF Aktiengesellschaft 67056 Ludwigshafen, Germany



Terluran® HH-112



The Chemical Company

Typical values 1) at 23℃	Test method 2)	Unit	Values
PROPERTIES			
Polymer abbreviation Density Filler content: Glass fiber (GF)	ISO 1183	kg/m³ %	ABS 1050 -
PROCESSING			
Processing: Injection moulding (M), Extrusion (E), Blow moulding (B) Melt volume-flow rate MVR Temperature Load Pre-drying: Temperature Pre-drying: Time Melt temperature, injection moulding Mould temperature, injection moulding Moulding shrinkage, free, longitudinal	ISO 1133 ISO 1133 ISO 1133 - - - -	cm³/10min °C kg °C h °C °C %	M 6 220 10 80 2-4 230 - 270 30 - 60 0.4 - 0.7
FLAMMABILITY			
UL94 rating at 1.6 mm thickness Automotive materials (thickness d >= 1mm)	UL 94 -	class -	HB +
MECHANICAL PROPERTIES			
Tensile modulus Yield stress, 50 mm/min Yield strain, 50 mm/min Nominal strain at break, 50 mm/min Flexural strength Charpy impact strength (23°C) Charpy impact strength (-30°C) Izod notched impact strength (-30°C) Izod notched impact strength (-30°C) Charpy notched impact strength (-30°C) Charpy notched impact strength (-30°C) Izod notched impact strength (-30°C) Ball indentation hardness Force Duration	ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 527-1/-2 ISO 178 ISO 179/1eU ISO 179/1eU ISO 180/1A ISO 180/1A ISO 179/1eA ISO 179/1eA ISO 179/1eA ASTM D 256 ISO 2039-1 ISO 2039-1 ISO 2039-1	MPa MPa % MPa kJ/m² kJ/m² kJ/m² kJ/m² kJ/m² J/m MPa N S	2700 58 3.1 8 81 140 80 12 5 12 5 12 5 110 114 358 30
THERMAL PROPERTIES			
HDT A (1.80 MPa), measured using dried specimens HDT B (0.45 MPa), measured using dried specimens Vicat softening temperature VST/A/50 Vicat softening temperature VST/B/50 Max. service temperature (short cycle operation) Coefficient of linear thermal expansion, longitudinal (23-80)°C Thermal conductivity	ISO 75-1/-2 ISO 75-1/-2 ISO 306 ISO 306 ISO 11359-1/-2 DIN 52612-1	°C °C °C °C E-4/°C W/(m K)	109 113 118 112 90 0.7 - 1.1 0.17
ELECTRICAL PROPERTIES			
Volume resistivity Electric strength K20/P50, d = 0.6 - 0.8 mm	IEC 60093 IEC 60243-1	Ohm*m kV/mm	1E13 41

Footnotes

1) If the product definition doesn't state otherwise.

2) Specimens according to CAMPUS.