

# Terluran ECO GP-22 MR50

Mechanical Post Consumer Recycling Acrylonitrile Butadiene Styrene (rABS)

**TECHNICAL  
DATASHEET**

## DESCRIPTION

Terluran® ECO GP-22 MR50 is a mechanical post consumer recycling (PCR) grade, with a PCR content of at least 50% in a standard black color. It combines easy-flow, high impact resistance and heat distortion with high quality surface finish; intended for a wide range of applications and visible parts.

## FEATURES

- Medium flow
- Good impact resistance
- Good heat distortion resistance
- High quality surface finish and gloss
- Great mechanical strength and rigidity
- Standard black color

## APPLICATIONS

- Injection molding
- Appliance housings
- Household and electronics appliances
- Visible parts

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm <sup>3</sup> /10 min	22
<b>Mechanical Properties</b>			
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m <sup>2</sup>	22
Charpy Notched Impact Strength, -30 °C	ISO 179/1eA	kJ/m <sup>2</sup>	7
Tensile Stress at Yield, 23 °C	ISO 527	MPa	35
Tensile Strain at Yield, 23 °C	ISO 527	%	2.6
Tensile Stress at Break, 23 °C	ISO 527	MPa	25
Tensile Strain at Break, 23 °C	ISO 527	%	8
Tensile Modulus	ISO 527	MPa	2000
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	90
<b>Processing</b>			

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## SUPPLY FORM

Terluran® ECO is delivered as spherical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm<sup>3</sup>. 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 ECO pellets can be stored for relatively long periods of time without any change in mechanical properties. Under poor storage conditions, Terluran ECO 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, 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/m<sup>3</sup> = 86 mg/m<sup>3</sup>; acrylonitrile, TRK-value: 3 ml/m<sup>3</sup> = 7 mg/m<sup>3</sup> and 1,3-butadiene, TRK-value: 5 ml/m<sup>3</sup> = 11 mg/m<sup>3</sup>. 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 ECO 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 hazardous 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 ECO safety data sheets.

## DISCLAIMER

The aforementioned data shall constitute the agreed contractual quality of the product sold by INEOS Styrolution at the time of passing of risk. INEOS Styrolution does not make any further warranty, representation or guarantee of any kind, express or implied, regarding the suitability of the product for any particular purpose or application and 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 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.