

**DESCRIPTION**

Lustran<sup>®</sup> 520 ABS is a high impact, medium gloss injection molding grade with an excellent balance of physical and processing attributes.

**FEATURES**

- Excellent toughness
- Pale white color

**APPLICATIONS**

- General purpose injection molding
- Consumer goods, toys

Property, Test Condition	Standard	Unit	Values
<b>Rheological Properties</b>			
Melt Volume Rate 220 °C/10 kg	ASTM D1238	g/10 min	19.0
<b>Mechanical Properties</b>			
Izod Notched Impact Strength, 23°C	ASTM D256	ft-lb <sub>i</sub> /in	6.0
Izod Notched Impact Strength, 0°C	ASTM D256	ft-lb <sub>i</sub> /in	3.5
Tensile Stress at Yield, 23°C	ASTM D638	psi	5,800
Tensile Stress at Break, 23°C	ASTM D638	psi	4,650
Tensile Strain at Break, 23°C	ASTM D638	%	23
Tensile Modulus	ASTM D638	psi	305,000
<b>Thermal Properties</b>			
Vicat Softening Temperature VST/B/50 (50N, 50°C/h)	ASTM D1525	°F	225
Heat Deflection Temperature, 1.82 MPa, (Annealed 80°C /24 h)	ASTM D648	°F	213
Heat Deflection Temperature, 0.455 MPa, (Annealed 80°C /24 h)	ASTM D648	°F	217
<b>Other Properties</b>			
Specular Gloss, 60°	ASTM 523	%	80
Specular Gloss, 20°	ASTM 523	%	40
<b>Processing</b>			
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4

The nominal properties listed are typical of the natural color product but should not be used for specification purposes.

## SUPPLY FORM

Lustran® ABS is delivered in the form of cylindrical or spherical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm<sup>3</sup>. 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, Lustran® ABS pellets can be stored for relatively long periods of time without any change in mechanical properties. With unstable colors, however, storage over several years can give rise to some change in color. Under poor storage conditions, Lustran® ABS 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 following limit values are valid TRGS 900 (Aug. 2004): styrene, MAK-value: 20 ml/m<sup>3</sup>; alpha-methylstyrene, MAK-value: 100 ml/m<sup>3</sup>; acrylonitrile, TRK-value: 3 ml/m<sup>3</sup>, and butyl acrylate, MAK-value: 2 ml/m<sup>3</sup> (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 Lustran® 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 Lustran 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 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.