INEOS STYROLUTION

Novodur 650

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® 650 is an injection molding grade of ABS with high impact strength, high flow and high gloss.

FEATURES

- High impact strength
- High gloss
- Easy flowing

APPLICATIONS

- Home appliances
- Electrical and electronics
- General Injection Molding Application
- Toys, Sport & Leisure

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm³/10 min	22
Mechanical Properties			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m²	22
Izod Notched Impact Strength, -20 °C	ISO 180/A	kJ/m²	15
Izod Notched Impact Strength, -30 °C	ISO 180/A	kJ/m²	9
Tensile Stress at Break, 23 °C	ISO 527	MPa	33
Tensile Stress at Yield, 23 °C	ISO 527	MPa	44
Tensile Strain at Break, 23 °C	ISO 527	%	20
Tensile Modulus	ISO 527	MPa	2250
Flexural Strength, 23 °C	ISO 178	MPa	68
Flexural Modulus, 23 °C	ISO 178	MPa	2200
Hardness, Rockwell	ISO 2039-2	R scale	110
Thermal Properties			
Vicat Softening Temperature, B/2 (120 °C/h, 50N)	ASTM D 1525	°C	98
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	91
Heat Deflection Temperature B; (annealed 4 h/80 °C; 0.45 MPa)	ISO 75	°C	94
Optical Properties			

Contact us:
Phone +82 2 6322 7775
INSTY.asia@ineos.com
www.ineos-styrolution.com

Revision Date: 02/19/19

Novodur 650

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

Property, Test Condition	Standard	Unit	Values
Specular Gloss, 60 °	-		87
Other Properties			
Density	ISO 1183	kg/m³	1040
Processing			
Linear Mold Shrinkage	ISO 294-4	%	0.4 - 0.6

Typical values for uncolored products

SUPPLY FORM

Novodur is delivered in the form of cylindrical or cubical 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 paper bag. 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, Novodur 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, Novodur 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/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 Novodur® 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 Novodur 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.

Contact us:
Phone +82 2 6322 7775
INSTY.asia@ineos.com
www.ineos-styrolution.com