

Novodur Xspray

Acrylonitrile Butadiene Styrene (ABS)

TECHNICAL DATASHEET

DESCRIPTION

Novodur® Xspray is an ABS alloy that offers good chemical resistance and excellent paint adhesion that is re-quired in high luminance spray painting to achieve the desired superior metallic appearance. The good chemical resistance also eliminates the need for the primer treatment process, hence resulting in eco-friendliness and better cost savings for the customer.

FEATURES

- Enhanced scratch resistance after painting
- Excellent chemical resistance
- Good paint adhesion

APPLICATIONS

- Household
- Electronics
- Automotive

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Volume Rate 220 °C/10 kg	ISO 1133	cm ³ /10 min	15
Melt Volume Rate, 240 °C/10 kg	ISO 1133	cm ³ /10 min	45
Mechanical Properties			
Izod Notched Impact Strength, 23 °C	ISO 180/A	kJ/m ²	15
Charpy Notched Impact Strength, 23° C	ISO 179/1eA	kJ/m ²	9
Tensile Stress at Yield, 23 °C	ISO 527	MPa	43
Tensile Strain at Yield, 23 °C	ISO 527	%	2.9
Tensile Modulus	ISO 527	MPa	2090
Flexural Strength, 23 °C	ISO 178	MPa	64
Flexural Modulus, 23 °C	ISO 178	MPa	2100
Hardness, Rockwell	ISO 2039-2	R scale	110
Thermal Properties			
Vicat Softening Temperature VST/B/50 (50N, 50 °C/h)	ISO 306	°C	96
Heat Deflection Temperature A; (annealed 4 h/80 °C; 1.8 MPa)	ISO 75	°C	93
Other Properties			
Density	ISO 1183	kg/m ³	1050
Processing			

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Property, Test Condition	Standard	Unit	Values
Melt Temperature Range	ISO 294	°C	230 - 250
Mold Temperature Range	ISO 294	°C	40 - 80
Drying Temperature	-	°C	80
Drying Time	-	h	2 - 4

Typical values for uncolored products

SUPPLY FORM

Novodur® Xspray is delivered in the form of cylindrical pellets. The bulk density of the pellets is from 0.55 to 0.65 g/cm³. Standard Packaging unit: 25 kg PE sack, pelletized and film-secured. Subject to agreement, other means of packing are possible, e.g. 1000 kg bulk containers (octagonal IBCs, or intermediate bulk container, made from corrugated board with sack insert) or shipping by road tanker can be arranged. In dry areas with normal temperature control, Novodur® Xspray 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® Xspray absorbs moisture, but this can be removed by drying. Packs stored in cold areas should be brought to ambient temperature before opening to prevent condensation on the pellets

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/m³ = 86 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 Novodur® Xspray 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 Novodur® Xspray 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.