

Luran S 776SE

Acrylonitrile Styrene Acrylate (ASA)

TECHNICAL
DATASHEET

DESCRIPTION

Luran® S 776SE is suitable for extrusion applications. It provides good impact toughness and enables a matte surface appearance for extruded sheets.

FEATURES

- Good impact strength
- Suitable for extrusion
- Enables a matte surface finish in extrusion

APPLICATIONS

- Sheets
- Gardening equipment

Property, Test Condition	Standard	Unit	Values
Rheological Properties			
Melt Flow Rate, 220 °C/10 kg	ASTM D 1238	g/10 min	4
Mechanical Properties			
Izod Notched Impact Strength, 23 °C (73 °F)	ASTM D 256	ft-lb/in	4.9
Izod Notched Impact Strength, -40 °C (-40 °F)	ASTM D 256	ft-lb/in	1
Tensile Stress at Yield, 23 °C	ASTM D 638	psi	4780
Tensile Modulus	ASTM D 638	psi x 10 ³	239
Elongation, Failure	ASTM D 638	%	2.7
Flexural Strength, 23 °C	ASTM D 790		6810
Flexural Modulus, 23 °C	ASTM D 790	psi x 10 ³	241
Hardness, Rockwell	ASTM D 785	R scale	89
Hardness, Shore D	ASTM D 2240	-	60
Thermal Properties			
Vicat Softening Temperature, VST/A/50 (10N, 50 °C/h)	ISO 306	°F	197
DTUL @ 264 psi - Annealed	ASTM D 648	°F	181
DTUL @ 66 psi - Annealed	ASTM D 648	°F	213
Electrical Properties			
Dielectric Constant at 106 CPS (1000000 Hz, 0,0394 in)	ASTM D 150	-	3.4

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Property, Test Condition	Standard	Unit	Values
Volume Resistivity	ASTM D 257	-	>10 ¹²
Surface Resistivity	ASTM D 257	-	>10 ¹³
Optical Properties			
Specular Gloss, 60 °	ASTM D 523		48
Light Transmission at 550 nm	ASTM D 1003	%	90
Other Properties			
Density	ASTM D 792	lb/in ³	1.07
Water Absorption, Saturated at 23 °C	ASTM D 570	%	1.65
Processing			
Linear Mold Shrinkage	ASTM D 955	in/in	0.0055
Drying Temperature	-	°F	176
Suggested Max. Regrind	-	%	30

Typical values for uncolored products

SUPPLY FORM

Luran® S 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. 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, Luran S 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, Luran S 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 Luran® S 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 Luran S 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.