



Monday, July 25, 2005

## Luran® S 797 SE

BASF Corporation - Acrylonitrile Styrene Acrylate


Unit System: English

## View


Datasheet Shown Below

ASTM Data Sheet 

ISO Data Sheet --

CAMPUS® Data Sheet 

## Actions

Product Sourcing Supplier Portal E-mail a Datasheet Product Alternatives 

## General Information

## Product Description

Luran S 797 SE is an extrusion ASA grade with especially high notched impact strength, used for sheet and profile extrusions. The data representable is based on extruded sheet.

## General

Material Status	● Commercial: Active
Availability	● Europe ● North America
Test Standards Available	● ASTM ● ISO 10350
Additive	● Impact Modifier
Features	● Impact Modified ● Impact Resistance, High
Uses	● Furniture ● Lawn and Garden Equipment ● Housings ● Sporting Goods
Agency Ratings	● UL Unspecified Rating
Appearance	● Natural Color
Forms	● Pellets
Processing Method	● Extrusion ● Extrusion, Profile ● Extrusion, Sheet
Multi-Point Data	● Creep Modulus vs. Time (ISO 11403-1) ● Secant Modulus vs. Strain (ISO 11403-1) ● Isochronous Stress vs. Strain (ISO 11403-1) ● Viscosity vs. Shear Rate (ISO 11403-2) ● Isothermal Stress vs. Strain (ISO 11403-1)

ASTM and ISO Properties <sup>1</sup>

Physical	Nominal Value	Unit	Test Method
Mold Shrink, Linear-Flow	0.0055	in/in	ASTM D955
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus (73 °F)	265000	psi	ASTM D638
Tensile Strength @ Yield (73 °F) <sup>2</sup>	5800	psi	ASTM D638
Tensile Elongation @ Yld (73 °F) <sup>2</sup>	2.9	%	ASTM D638
Tensile Elongation @ Brk (73 °F) <sup>2</sup>	27	%	ASTM D638
Flexural Modulus (73 °F)	226000	psi	ASTM D790
Flexural Strength (73 °F)	8270	psi	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact			ASTM D256
(-40 °F)	1.07	ft-lb/in	
(73 °F, 0.125 in)	5.25	ft-lb/in	
Hardness	Nominal Value	Unit	Test Method
Rockwell Hardness (R-Scale)	90		ASTM D785

Thermal	Nominal Value	Unit	Test Method
Vicat Softening Point (Rate A, Loading 2 (50 N))	194	°F	ASTM D1525
CLTE, Flow	0.000061	in/in/°F	ASTM D696

### CAMPUS® Properties <sup>3</sup>

Rheological properties	Nominal Value	Unit	Test Method
Melt volume-flow rate (220°C/10.0 kg)	0.336	in <sup>3</sup> /10min	ISO 1133
Mechanical properties 23°C/50%r.h.	Nominal Value	Unit	Test Method
Tensile modulus	290000	psi	ISO 527-1, -2
Yield stress	6090	psi	ISO 527-1, -2
Yield strain	3.5	%	ISO 527-1, -2
Nominal strain at break	11.0	%	ISO 527-1, -2
Tensile creep modulus (1000h)	160000	psi	ISO 899-1
Charpy impact strength (+23°C)	119	ft-lb/in <sup>2</sup>	ISO 179 /1eU
Charpy impact strength (-30°C)	85.7	ft-lb/in <sup>2</sup>	ISO 179 /1eU
Charpy notched impact strength (+23°C)	19.0	ft-lb/in <sup>2</sup>	ISO 179 /1eA
Charpy notched impact strength (-30°C)	4.28	ft-lb/in <sup>2</sup>	ISO 179 /1eA
Thermal properties	Nominal Value	Unit	Test Method
Temp. of deflection under load (1.80 MPa)	203	°F	ISO 75-1, -2
Temp. of deflection under load (0.45 MPa)	212	°F	ISO 75-1, -2
Vicat softening temperature (50°C/h 50N)	194	°F	ISO 306
Coeff.of linear therm. expansion (parallel)	0.000053	in/in/°F	ISO 11359-1, -2
Burning Behav. at 1.6mm nom. thckn. (0.06 in, UL)	HB		ISO 1210
Burning Behav. at thickness h (0.0331 in, UL)	HB		ISO 1210
Oxygen index	19	%	ISO 4589-1, -2
Electrical properties 23°C/50%r.h.	Nominal Value	Unit	Test Method
Relative permittivity (100 Hz)	3.80		IEC 60250
Relative permittivity (1 MHz)	3.30		IEC 60250
Dissipation factor (100 Hz)	0.0090		IEC 60250
Dissipation factor (1 MHz)	0.026		IEC 60250
Volume resistivity	3.9E+13	ohm-in	IEC 60093
Surface resistivity	1.0E+13	ohms	IEC 60093
Electric strength	890	V/mil	IEC 60243-1
Comparative tracking index	600		IEC 60112
Other properties	Nominal Value	Unit	Test Method
Water absorption	1.6	%	ISO 62
Humidity absorption	0.35	%	ISO 62
Density	0.0387	lb/in <sup>3</sup>	ISO 1183
Test specimen production	Nominal Value	Unit	Test Method
Injection Molding, melt temperature	482	°F	ISO 294
Injection Molding, mold temperature	140	°F	ISO 10724
Injection Molding, injection velocity	8	in/sec	ISO 294

### Processing Information

Injection	Nominal Value	Unit
Drying Temperature	174	°F
Drying Time	2.0 to 4.0	hr
Suggested Max Regrind	30	%

Blow Molding Notes
PREPROCESSING
Pre-drying temperature 80 °C
Pre-drying time 2-4 h
PROCESSING
Melt temperature 210 - 230 °C
Mold temperature 60 °C

### Notes

1 Typical properties: these are not to be construed as specifications.

2 2 in/min

3 Typical properties: these are not to be construed as specifications. Additional CAMPUS® data and disclaimer information may be found on CAMPUS® Data Sheet.

