



# Lustran® 348

## INEOS Styrolution - Acrylonitrile Butadiene Styrene

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### General Information

#### Product Description

Lustran® 348 resin is an injection molding grade of ABS (Acrylonitrile butadiene styrene) with medium-impact and high-gloss.

#### FEATURES

- Healthcare certifications
- High gloss
- Medium impact
- Meets FDA modified ISO 10993-1 requirements
- Meets U.S. Pharmacopeia 23 Class VI test requirements
- UL Classification 94HB

#### APPLICATIONS

- Components of intravenous (IV) systems
- Surgical instruments
- Diagnostic test kits
- UL Classification 94HB

#### General

Material Status	• Commercial: Active		
Regional Availability	• Africa & Middle East • Asia Pacific	• Europe • Latin America	• North America
Features	• High Gloss	• Medium Impact Resistance	
Uses	• Medical/Healthcare Applications • Surgical Instruments		
Agency Ratings	• FDA Unspecified Rating	• USP Class VI	
Forms	• Pellets		
Processing Method	• Injection Molding		

### ASTM & ISO Properties <sup>1</sup>

Physical	Typical Value (English)	Typical Value (SI)	Test Method
Density / Specific Gravity	1.06	1.06	ASTM D792
Melt Mass-Flow Rate (MFR)			ASTM D1238
220°C/10.0 kg	14 g/10 min	14 g/10 min	
230°C/3.8 kg	5.0 g/10 min	5.0 g/10 min	
Molding Shrinkage - Flow	4.0E-3 to 6.0E-3 in/in	0.40 to 0.60 %	ASTM D955
Mechanical	Typical Value (English)	Typical Value (SI)	Test Method
Tensile Modulus	380000 psi	2620 MPa	ASTM D638
Tensile Strength (Yield, 73°F (23°C))	7000 psi	48.3 MPa	ASTM D638
Flexural Modulus (73°F (23°C))	390000 psi	2690 MPa	ASTM D790
Flexural Strength (73°F (23°C))	11000 psi	75.8 MPa	ASTM D790
Impact	Typical Value (English)	Typical Value (SI)	Test Method
Notched Izod Impact (73°F (23°C))	4.0 ft-lb/in	210 J/m	ASTM D256
Hardness	Typical Value (English)	Typical Value (SI)	Test Method
Rockwell Hardness (R-Scale)	112	112	ASTM D785

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Thermal	Typical Value (English)	Typical Value (SI)	Test Method
Deflection Temperature Under Load			ASTM D648
66 psi (0.45 MPa), Unannealed	199 °F	92.8 °C	
66 psi (0.45 MPa), Annealed	212 °F	100 °C	
264 psi (1.8 MPa), Unannealed	186 °F	85.6 °C	
264 psi (1.8 MPa), Annealed	204 °F	95.6 °C	
Vicat Softening Temperature	225 °F	107 °C	ASTM D1525 <sup>2</sup>
CLTE - Flow	4.5E-5 in/in/°F	8.1E-5 cm/cm/°C	ASTM D696

### Processing Information

Injection	Typical Value (English)	Typical Value (SI)
Drying Temperature	175 °F	79 °C
Drying Time	2.0 to 4.0 hr	2.0 to 4.0 hr
Processing (Melt) Temp	475 to 525 °F	246 to 274 °C
Mold Temperature	85 to 140 °F	29 to 60 °C

### Notes

<sup>1</sup> Typical properties: these are not to be construed as specifications.

<sup>2</sup> Rate B (120°C/h), Loading 1 (10 N)