Lustran® 348

INEOS Styrolution - Acrylonitrile Butadiene Styrene

Tuesday, April 9, 2019

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 [1]

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 [2]
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

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

[2] Rate B (120°C/h), Loading 1 (10 N)