DuraStar™ DS1900HF

Thermoplastic Polyester

Eastman Chemical Company

Message:

Durastar™ DS1900HF polymer is a high flow grade of Durastar™ . Durastar™ DS1900HF flow lengths are increased 20-40% relative to Durastar™ DS1000 as shown by spiral flow testing. Other outstanding features of Durastar™ are easily maintained such as excellent appearance and clarity, good physical properties, chemical resistance, and easy processing. This high flow product is especially suited for those applications utilizing thin-walled intricate tools. Under existing United States Food and Drug Administration (FDA) regulations, Durastar™ DS1900HF may be used in food contact articles which comply with the specifications and conditions of use in 21 CFR 177.1240.

General Information			
UL YellowCard	E118289-220140		
Features	Fast Molding Cycle Food Contact Acceptable Good Chemical Resistance Good Impact Resistance Good Processability High Clarity High Flow Pleasing Surface Appearance		
Uses	Appliances Flooring Maintenance/Repair Furniture Household Goods Sporting Goods Thin-walled Parts Toys Writing Instruments		
Agency Ratings	FDA 21 CFR 177.1240		
Appearance	Natural Color		
Forms	Pellets		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Specific Gravity	1.19	g/cm^3	ASTM D792
Molding Shrinkage - Flow	0.30	%	ASTM D955
Water Absorption (23°C, 24 hr)	0.15	%	ASTM D570
Hardness	**Nominal Value**	**Unit**	**Test Method**
Rockwell Hardness (R-Scale, 23°C)	107		ASTM D785
Mechanical	**Nominal Value**	**Unit**	**Test Method**

Tensile Strength			ASTM D638
Yield, 23°C	50.0	MPa	
Break, 23°C	43.0	MPa	
Tensile Elongation			ASTM D638
Yield, 23°C	5.0	%	
Break, 23°C	270	%	
Flexural Modulus (23°C)	1900	MPa	ASTM D790
Flexural Strength (Yield, 23°C)	68.0	MPa	ASTM D790
Impact	**Nominal Value**	**Unit**	**Test Method**
Notched Izod Impact			ASTM D256
-40°C	44	J/m	
23°C	80	J/m	
Unnotched Izod Impact			ASTM D4812
-40°C	No Break		
23°C	No Break		
Instrumented Dart Impact			ASTM D3763
-40°C, Energy at Peak Load	38.0	J	
23°C, Energy at Peak Load	40.0	J	
Thermal	**Nominal Value**	**Unit**	**Test Method**
Deflection Temperature Under Load			ASTM D648
0.45 MPa, Unannealed	73.0	°C	
1.8 MPa, Unannealed	66.0	°C	
Vicat Softening Temperature	86.0	°C	ASTM D1525 [1]
Optical	**Nominal Value**	**Unit**	**Test Method**
Transmittance (Total)	92.0	%	ASTM D1003
Haze	< 1.0	%	ASTM D1003
Injection	**Nominal Value**	**Unit**	
Drying Temperature	70.0	°C	
Drying Time	4.0	hr	
Processing (Melt) Temp	230 to 280	°C	
Mold Temperature	15.0 to 30.0	°C	
NOTE			
1.	Loading 1 (10 N)		

Recommended distributors for this material

Susheng Import & Export Trading Co.,Ltd.

Tel: +86 21 5895 8519

Phone: +86 13424755533

Email: sales@su-jiao.com

No. 215, Lianhe North Road, Fengxian District, Shanghai, China