DuraStar™ DS1910HF

Thermoplastic Polyester

Eastman Chemical Company

Message:

Durastar™ DS1910HF polymer is a high flow grade of Durastar™ that contains a mold release. Durastar™ DS1910HF flow lengths are increased 20-40% relative to Durastar™ DS1010 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™ DS1910HF may be used in food contact articles which comply with the specifications and conditions of use in 21 CFR 177.1240.
This product is certified to ANSI/NSF Standard 51.

General Information	
UL YellowCard	E118289-220141
Additive	Mold Release
Features	Fast Molding Cycle
	Food Contact Acceptable
	Good Chemical Resistance
	Good Impact Resistance
	Good Mold Release
	Good Processability
	High Clarity
	High Flow
	Pleasing Surface Appearance
Uses	Appliance Components
	Appliances
	Flooring Maintenance/Repair
	Furniture
	Household Goods
	Sporting Goods
	Stationary Supplies
	Thin-walled Parts
	Toys
	Writing Instruments
Agency Ratings	FDA 21 CFR 177.1240
	NSF 51
Appearance	Natural Color
Forms	Pellets
Processing Method	Injection Molding

Physical	Nominal Value	Unit	Test Method

Specific Gravity	1.19	g/cm³	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.

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