EL-Lene™ H555J

High Density Polyethylene SCG Chemicals Co., Ltd.

Message:

EL-Lene H555J is a high density polyethylene resin with good environmental stress cracking resistance, good processing performance, organoleptic property. It is particularly designed for injection molding and extrusion compression molding of screw cap and closure.

Additive Slip Features Food Contact Acceptable Good Organoleptic Properties Good Processability High ECR (Stress Crack Resist.) Slip Closures Closures Closures Closures Processing Method Processing Method Properties Compression Molding Extrusion Injection Molding Protesting Nate (MFR) (190°C/2.16 Kg) Slip Across Flow: 2.00 mm 1.8 a	General Information			
Good Organoleptic Properties Good Processability High ESCR (Stress Crack Resist.) Silip Uses Caps Closures EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Pellets Compression Molding Extrusion Injection	Additive	Slip		
Good Processability High ESCR (Stress Crack Resist.) Silip	Features	Food Contact Acceptable		
High ESCR (Stress Crack Resist.) Slip Uses Caps Closures EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Pellets Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Meth Mass-Flow Rate (MFR) (190°C/2.16 kg pap.) Flow: 2.00 mm 1.8		Good Organoleptic Properties		
Uses Caps Closures Agency Ratings EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Pellets Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage Internal Method Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (5°C,*** 10% Igepal. Compression Molded. F50) 2.0.0 hr ASTM D1698 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Melt Mass-Flow Quit Test Method Durometer Hardness (Shore D) 64 Mechanical Nominal Value Unit Test Method Tensile Strength 1 ASTM D2240 Mechanical Nominal Value Unit Test Method Test Method Test Method ASTM D2240		Good Processability		
Uses Caps Closures EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Pellets Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Medit Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage Internal Method Elow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% legepal, Compression Molded, F50) Physical Nominal Value Unit Test Method Elow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% legepal, Compression Molded, F50) Physical Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Mechanical Nominal Value Unit Test Method Tensile Strength 1 Lest Method		High ESCR (Stress Crack Resist.)		
Agency Ratings EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Plelets Compression Molding Extrusion Injection Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0.956 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) I.8 Molding Shrinkage Flow : 2.00 mm 2.5 Across Flow : 2.00 mm 2.5 Across Flow : 2.00 mm 2.0 Environmental Stress-Cracking Resistance (60°C, 10% (gepal, Compression Molded, F50) Environmental Stress-Cracking Resistance (60°C, 10% (gepal, Compression Molded, F50) Durometer Hardness Nominal Value Nominal Value Unit Test Method Test Method ASTM D16938 Hardness Nominal Value Unit Test Method Test Method ASTM D2240 Mechanical Nominal Value Unit Test Method Test Method ASTM D2240		Slip		
Agency Ratings EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Plelets Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0.956 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) I.8 Molding Shrinkage Flow : 2.00 mm 2.5 Acros Flow : 2.00 mm 2.5 Acros Flow : 2.00 mm 2.5 Acros Flow : 2.00 mm 2.0				
Agency Ratings EEC 2002/72/EC FDA 21 CFR 177.1520 Forms Pellets Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0.956 0g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 0/910 min ASTM D1238 Molding Shrinkage Flow: 2.00 mm 2.5 Across Flow: 2.00 mm 2.3 Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) Archards Nominal Value Unit Test Method ASTM D1693B Hardness Nominal Value Unit Test Method Mechanical Nominal Value Unit Test Method ASTM D2240 Mechanical Nominal Value Unit Test Method ASTM D2240	Uses	Caps		
Forms Pellets Processing Method Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0,956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) I.8. g/10 min ASTM D1238 Molding Shrinkage Internal Method Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) 20.0 hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Long Unit Test Method Test Method Tensile Strength 1 Long ASTM D1693B		Closures		
Forms Pellets Processing Method Compression Molding Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0.956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage 1.8 g/10 min ASTM D1238 Molding Shrinkage 2.5 % Across Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) 2.0 hr ASTM D16938 Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Unit Test Method	Agency Ratings	EEC 2002/72/EC		
Processing Method Compression Molding Extrusion Extrusion		FDA 21 CFR 177.1520		
Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0,956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage 18. g/10 min ASTM D1238 Molding Shrinkage 2.5 % Across Flow : 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Unit Test Method Test Method Mechanical Nominal Value Unit Test Method Test Method Test Method Test Method Test Method Test Method	Forms	Pellets		
Extrusion Injection Molding Physical Nominal Value Unit Test Method Density 0,956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage 18.5 g/10 min ASTM D1238 Molding Shrinkage 2.5 % Across Flow : 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Unit Test Method Test Method Mechanical Nominal Value Unit Test Method Test Method Test Method Test Method Test Method	Processing Method	Compression Molding		
Physical Nominal Value Unit Test Method Density 0,956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage Internal Method Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) 20.0 hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Unit Test Method Tensile Strength 1 Test Method Tensile Strength 1 Test Method				
Physical Nominal Value Unit Test Method Density 0,956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage Internal Method Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) 20.0 hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Long Mechanical Nominal Value Unit Test Method Test Method Mechanical Nominal Value Unit Test Method Test Method Mechanical Nominal Value Unit Test Method		Injection Molding		
Density 0.956 g/cm³ ASTM D1505 Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) 1.8 g/10 min ASTM D1238 Molding Shrinkage Internal Method Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Unit Test Method Mechanical Nominal Value Unit Test Method Tensile Strength 1 ASTM D638				
Melt Mass-Flow Rate (MFR) (190°C/2.16 kg) Molding Shrinkage Flow: 2.00 mm 2.5 Across Flow: 2.00 mm 2.3 Environmental Stress-Cracking Resistance (50°C, 10% lgepal, Compression Molded, F50) Across Flow: 2.00 mm 20.0 Internal Method Across Flow: 2.10 mm Ac	Physical	Nominal Value	Unit	Test Method
kg)1.8g/10 minASTM D1238Molding ShrinkageInternal MethodFlow: 2.00 mm2.5%Across Flow: 2.00 mm2.3%Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50)20.0hrASTM D1693BHardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)64UnitTest MethodMechanicalNominal ValueUnitTest MethodTensile Strength 1ASTM D638	Density	0.956	g/cm³	ASTM D1505
Molding Shrinkage Flow: 2.00 mm 2.5 Across Flow: 2.00 mm 2.3 Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) Across Flow: 2.00 Durometer Hardness (Shore D) Mechanical Nominal Value Nom	Melt Mass-Flow Rate (MFR) (190°C/2.16			
Flow: 2.00 mm 2.5 % Across Flow: 2.00 mm 2.3 % Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50)		1.8	g/10 min	
Across Flow: 2.00 mm Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) Hardness Nominal Value Unit Test Method Mechanical Nominal Value Unit Test Method ASTM D2240 ASTM D638	Molding Shrinkage			Internal Method
Environmental Stress-Cracking Resistance (50°C, 10% Igepal, Compression Molded, F50) 20.0 hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Mechanical Nominal Value Unit Test Method Tensile Strength 1 ASTM D2240 ASTM D638	Flow : 2.00 mm	2.5	%	
(50°C, 10% Igepal, Compression Molded, F50) 20.0 hr ASTM D1693B Hardness Nominal Value Unit Test Method Durometer Hardness (Shore D) 64 Mechanical Nominal Value Unit Test Method Tensile Strength 1 ASTM D638	Across Flow : 2.00 mm	2.3	%	
HardnessNominal ValueUnitTest MethodDurometer Hardness (Shore D)64ASTM D2240MechanicalNominal ValueUnitTest MethodTensile Strength 1ASTM D638	-			
Durometer Hardness (Shore D) 64 ASTM D2240 Mechanical Nominal Value Unit Test Method Tensile Strength 1 ASTM D638	F50)	20.0	hr	ASTM D1693B
MechanicalNominal ValueUnitTest MethodTensile Strength 1ASTM D638	Hardness	Nominal Value	Unit	Test Method
Tensile Strength ¹ ASTM D638	Durometer Hardness (Shore D)	64		ASTM D2240
	Mechanical	Nominal Value	Unit	Test Method
Yield 25.5 MPa	Tensile Strength ¹			ASTM D638
	Yield	25.5	MPa	

Break	34.3	MPa	
Tensile Elongation ² (Break)	1200	%	ASTM D638
Flexural Modulus	1080	MPa	ASTM D790
Flexural Strength	32.4	MPa	ASTM D790
Impact	Nominal Value	Unit	Test Method
Notched Izod Impact (23°C)	78	J/m	ASTM D256
Thermal	Nominal Value	Unit	Test Method
Deflection Temperature Under Load (0.45			
MPa, Unannealed)	78.0	°C	ASTM D648
Brittleness Temperature	< -60.0	°C	ASTM D746
Vicat Softening Temperature	128	°C	ASTM D1525
Melting Temperature	131	°C	ASTM D2117
Injection	Nominal Value	Unit	
Processing (Melt) Temp	200 to 240	°C	
Extrusion	Nominal Value	Unit	
Melt Temperature	150 to 180	°C	
NOTE			
1.	50 mm/min		
2.	50 mm/min		

The information and data on this page are provided by manufacturers and document providers. SHANGHAI SUSHENG assumes no legal liability. It is strongly recommended to verify all technical data with material suppliers before final material selection. All rights belong to the original authors. If any infringement occurs, please contact us immediately.

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

