Hyosung Polyketone M230A

Polyketone, Aliphatic

Hyosung Corporation

Message:

Hyosung Polyketone M230A

Low viscosity grade for high flow injection molding (Natural color)

AppearanceNatural ColorProcessing MethodInjection MoldingPhysicalNominal ValueUnitPhysical124g/cm ² Specific Gravity124g/cm ² Melt Mass-Flow Rate (MFR) (240°C/21650g/10 minMolding Shrinkage - Flow18 to 2.0%Molding Shrinkage - Flow18 to 2.0%Mater Absorption (Equilibrium, 23°C, 60%)148 to 2.0%Tensile Strength (23°C)120MalaASTM D53Floward Modulus (23°C)1270MPaASTM D526ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)19.0/malMatericaOuter Tensile Strength (23°C)10.0/malMOuter Tensile Strength (23°C)20°cImpact Tensile Strength (23°C)20°cImpact Tensile Strength (23°C)20°c	General Information			
Appearance Natural Color Processing Method Injection Molding Physical Norninal Value Unit Test Method Specific Gravity 1.24 grCm ¹ ASTM D792 Meld Mass-Flow Rate (MFR) (240°C/2.16 Specific Gravity 150 gr10 min ASTM D792 Molding Shrinkage - Flow 1.8 to 2.0 gr10 min ASTM D570 Water Absorption (Equilibrium, 23°C, 60) 0.45 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 02 XTM D785 Mechanical Nominal Value Unit Test Method Tensile Elongation (Break, 23°C) 2.5 % ASTM D563 Recural Modulus (23°C) 1270 MPa ASTM D790 Impact Nominal Value Unit Test Method Impact Nominal Value June Solution ASTM D783 Recural Strength (23°C) 4.90 MPa ASTM D790 Impact Norninal Value Unit Test Method Impac	Features	High Flow		
Nominal Value Unit Test Method Physical Nominal Value Unit Test Method Specific Gravity 1.24 g/cm ³ ASTM D792 Melt Mass-Flow Rate (MFR) (240°C/2.16 kg) 150 g/10 min ASTM D1238 Molding Shrinkage - Flow 1.8 to 2.0 % ASTM D955 Water Absorption (Equilibrium, 23°C, 60%) .45 % ASTM D957 Hardness Nominal Value Unit Test Method Mechanical Nominal Value Unit Test Method Reckwell Hardness (R-Scale) 102 XSTM D785 Reckmell Gravity 2.90 MPa ASTM D638 Tensile Elongation (Break, 23°C) > 25 % ASTM D790 Flexural Modulus (23°C) 1270 MPa ASTM D790 Flexural Strength (23°C) 49.0 MPa ASTM D790 Inpact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 49.0 MPa ASTM D570 Mean Command Value Unit Test Method		Low Viscosity		
PhysicalNominal ValueUnitTest MethodSpecific Gravity1.24g/cm³ASTM D792Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)150g/10 minASTM D1238Molding Shrinkage - Flow1.8 to 2.0%ASTM D955Water Absorption (Equilibrium, 23°C, 60% RH)0.45%ASTM D570Mater Absorption (Equilibrium, 23°C, 60% RH)0.45%ASTM D570Mater Absorption (Equilibrium, 23°C, 60% RH)0.45%ASTM D570Mater Absorption (Equilibrium, 23°C, 60% RH)0.45%ASTM D570Methodses (R-Scale)0.45%ASTM D785MechanicalNominal ValueUnitTest MethodRockwell Hardness (R-Scale)102Kast M D580MeshanicalNominal ValueUnitTest MethodTensile Elongation (Break, 23°C)> 25%ASTM D638Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest Method0.45 MPa, Unannealed100°C.1.8 MPa, Unannealed100°C.Metling Temperature220°CASTM D155ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms-cmASTM D257Dielectric Stren	Appearance	Natural Color		
Astm D792 Astm D792 Melt Mass-Flow Rate (MFR) (240°C/2.16 Is0 g/10 min Astm D1238 Melt Mass-Flow Rate (MFR) (240°C/2.16 Is0 g/10 min Astm D1238 Molding Shrinkage - Flow 1.8 to 2.0 % Astm D1538 Water Absorption (Equilibrium, 23°C, 60% K % Astm D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 102 Stm D785 Mechanical Nominal Value Unit Test Method Tensile Strength (23°C) 49.0 MPa ASTM D583 Isexural Modulus (23°C) 25.5 % ASTM D790 Isexural Strength (23°C) 49.0 MPa ASTM D790 Isexural Modulus (23°C) 49.0 MPa ASTM D790 Impact Nominal Value Unit Test Method Impact Nominal Value Unit StM D790 Impact Nominal Value Unit StM D790 Impact Nominal Value Unit StM Method </td <td>Processing Method</td> <td>Injection Molding</td> <td></td> <td></td>	Processing Method	Injection Molding		
Melt Mass-Flow Rate (MFR) (240°C/2.16 150 g/10 min ASTM D1238 Molding Shrinkage - Flow 1.8 to 2.0 % ASTM D955 Water Absorption (Equilibrium, 23°C, 60% RH) 0.45 % ASTM D570 Hardness Nominal Value Unit Test Method Rockwell Hardness (R-Scale) 102 ASTM D785 Mechanical Nominal Value Unit Test Method Tensile Strength (23°C) 49.0 MPa ASTM D633 Tensile Elongation (Break, 23°C) 25 % ASTM D634 Flexural Modulus (23°C) 1270 MPa ASTM D790 Impact Nominal Value Unit Test Method Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 49.0 MPa ASTM D790 Impact Nominal Value Unit Test Method Charpy Notched Impact Strength (23°C) 49.0 //ma ASTM D550 Impact Nominal Value Unit Test Method Deflection Temperature Under Load	Physical	Nominal Value	Unit	Test Method
kg1509/10 minASTM D1288Molding Shrinkage - Flow1.8 to 2.0%ASTM D570Water Absorption (Equilibriur, 23°C, 60%)645%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale)02STM D78MechanicalNominal ValueUnitTest MethodTensile Strength (23°C)49.0MPaASTM D638Flexural Modulus (23°C)25MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790Flexural Strength (23°C)40.0MPaASTM D790Charpy Notchel Impact Strength (23°C)40.0MPaASTM D550Informatione100°CTest MethodNama Law20°CASTM D755Informatione20°CASTM D755Informatione20°CASTM D755Informatione100°CTest MethodNama Law10%°CSTM D755Informatione10%°CSTM D757Informatione	Specific Gravity	1.24	g/cm³	ASTM D792
NameNormal ValueUnitASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale)102ASTM D785MechanicalNominal ValueUnitTest MethodTensile Strength (23°C)49.0MPaASTM D638Flexural Modulus (23°C)> 25%ASTM D790Flexural Strength (23°C)49.0MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load205°C*C1.8 MPa, Unannealed100°C*CInternet Strength200°CASTM D1525IelectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20KV/mmASTM D149FlemmabilityNominal ValueUnitTest Method	Melt Mass-Flow Rate (MFR) (240°C/2.16 kg)	150	g/10 min	ASTM D1238
RH)0.45%ASTM D570HardnessNominal ValueUnitTest MethodRockwell Hardness (R-Scale)102ASTM D785MechanicalNominal ValueUnitTest MethodTensile Strength (23°C)49.0MPaASTM D638Tensile Elongation (Break, 23°C)> 25%ASTM D638Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256Nominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256Charpy Notched Impact Strength (23°C)49.0J/mASTM D256Charpy Notched Impact Strength (23°C)49.0J/mASTM D256Charpy Notched Impact Strength (23°C)49.0J/mASTM D256Deflection Temperature Under Load205°C*1.8 MPa, Unannealed100°C**I.8 MPa, Unannealed100°C**I.8 MPa, Unannealed10.0°C**Volume Resistivity10.8 *ohms ·cmASTM D257Dielectric Strength20KVmmASTM D257Dielectric Strength20KVmmASTM D257Dielectric StrengthNominal ValueUnitTest Method	Molding Shrinkage - Flow	1.8 to 2.0	%	ASTM D955
Rockwell Hardness (R-Scale)102ASTM D785MechanicalNominal ValueUnitTest MethodTensile Strength (23°C)49.0MPaASTM D638Tensile Elongation (Break, 23°C)> 25%ASTM D638Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under LoadVolume ResistivityASTM D1525Ita MPa, Unannealed100°CSTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Electric Strength20WinmannealedASTM D257Dielectric StrengthNominal ValueUnitTest MethodFlammabilityNominal ValueUnitTest Method	Water Absorption (Equilibrium, 23°C, 60% RH)		%	ASTM D570
MechanicalNominal ValueUnitTest MethodTensile Strength (23°C)49.0MPaASTM D638Tensile Elongation (Break, 23°C)> 25%ASTM D638Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load205°CSTM D6480.45 MPa, Unannealed100°CSTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149Plentertic StrengthNominal ValueUnitTest MethodVolume ResistivityNominal ValueUnitTest MethodNominal ValueUnitTest MethodSTM D257Dielectric StrengthNominal ValueUnitTest MethodNominal ValueUnitASTM D1257Dielectric StrengthNominal ValueUnitTest Method	Hardness	Nominal Value	Unit	Test Method
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Tensile Elongation (Break, 23°C)> 25%ASTM D638Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under LoadVoninal ValueUnitTest Method0.45 MPa, Unannealed205°CSTM D6481.8 MPa, Unannealed100°CSTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20KV/mmASTM D149Nominal ValueUnitTest MethodVolume ResistivityNominal ValueUnitDielectric StrengthKV/mmASTM D149HermabilityNominal ValueUnitHermabilityStem DataKV/mmHermabilityNominal ValueUnitHermabilityNominal ValueUnitHermabilityNominal ValueUnitHermabilityNominal ValueUnitHermabilityNominal ValueUnitHermabilityNominal ValueUnitHermatureStem DataHermatureNominal ValueMethodHermatureNominal ValueNominal ValueHermatureNominal ValueNominal ValueHermatureNominal Value <t< td=""><td>Mechanical</td><td>Nominal Value</td><td>Unit</td><td>Test Method</td></t<>	Mechanical	Nominal Value	Unit	Test Method
Flexural Modulus (23°C)1270MPaASTM D790Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under LoadVominal ValueUnitTest Method0.45 MPa, Unannealed205°CSTM D6481.8 MPa, Unannealed100°CSTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149Dielectric Strength20kV/mmASTM D149	Tensile Strength (23°C)	49.0	MPa	ASTM D638
Flexural Strength (23°C)49.0MPaASTM D790ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load°CASTM D6480.45 MPa, Unannealed100°CSTM D1525I.8 MPa, Unannealed205°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Tensile Elongation (Break, 23°C)	> 25	%	ASTM D638
ImpactNominal ValueUnitTest MethodCharpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under LoadVASTM D6480.45 MPa, Unannealed205°CSTM D6481.8 MPa, Unannealed100°CSTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms · cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Flexural Modulus (23°C)	1270	MPa	ASTM D790
Charpy Notched Impact Strength (23°C)49.0J/mASTM D256ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load205°CASTM D6480.45 MPa, Unannealed205°CC1.8 MPa, Unannealed100°CCMelting Temperature220°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Flexural Strength (23°C)	49.0	MPa	ASTM D790
ThermalNominal ValueUnitTest MethodDeflection Temperature Under Load205°CASTM D6480.45 MPa, Unannealed205°C·C1.8 MPa, Unannealed100°C·CMelting Temperature220°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms · cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Impact	Nominal Value	Unit	Test Method
Deflection Temperature Under LoadASTM D6480.45 MPa, Unannealed205°C1.8 MPa, Unannealed100°CMelting Temperature220°CElectricalNominal ValueUnitVolume Resistivity1.0E+15ohms·cmDielectric Strength20kV/mmFlammabilityNominal ValueUnitTest MethodSTM D149	Charpy Notched Impact Strength (23°C)	49.0	J/m	ASTM D256
0.45 MPa, Unannealed205°C1.8 MPa, Unannealed100°CMelting Temperature220°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20KV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Thermal	Nominal Value	Unit	Test Method
1.8 MPa, Unannealed100°CMelting Temperature220°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms · cmASTM D257Dielectric Strength20KV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Deflection Temperature Under Load			ASTM D648
Melting Temperature220°CASTM D1525ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms · cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	0.45 MPa, Unannealed	205	°C	
ElectricalNominal ValueUnitTest MethodVolume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	1.8 MPa, Unannealed	100	°C	
Volume Resistivity1.0E+15ohms·cmASTM D257Dielectric Strength20kV/mmASTM D149FlammabilityNominal ValueUnitTest Method	Melting Temperature	220	°C	ASTM D1525
Dielectric Strength 20 kV/mm ASTM D149 Flammability Nominal Value Unit Test Method	Electrical	Nominal Value	Unit	Test Method
Flammability Nominal Value Unit Test Method	Volume Resistivity	1.0E+15	ohms·cm	ASTM D257
	Dielectric Strength	20	kV/mm	ASTM D149
Flame Rating HB UL 94	Flammability	Nominal Value	Unit	Test Method
	Flame Rating	НВ		UL 94

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