

Amodel® AS-1133 HS
PPA-GF33

Syensqo

Processing/Physical Characteristics	Value	Unit	Test Standard
ASTM Data			
Mold Shrinkage, MD	0.004	mm/mm	ASTM D 955
Mold Shrinkage, TD	0.008	mm/mm	ASTM D 955
Water Absorption, 24hr	0.21	%	ASTM D 570
Mechanical Properties	dry / cond	Unit	Test Standard
ISO Data			
Tensile Modulus	12200 / -	MPa	ISO 527
Yield stress	225 / -	MPa	ISO 527
Strain at Break	3 / -	%	ISO 527
Impact Strength (Charpy), +23°C	82 / -	kJ/m²	ISO 179/1eU
Notched Impact Strength (Charpy), +23°C	11 / -	kJ/m²	ISO 179/1eA
Flexural Modulus (23°C)	10300 / -	MPa	ISO 178
Notched Impact Strength (Izod), 23°C	11 / -	kJ/m²	ISO 180/1A
ASTM Data			
Tensile Modulus	13100 / 13100	MPa	ASTM D 638
Tensile Strength at Break	221 / 193	MPa	ASTM D 638
Elongation at Break	2.5 / 2.1	%	ASTM D 638
Compressive Strength	276 / 247	MPa	ASTM D 695
Flexural Modulus	10300 / 10300	MPa	ASTM D 790
Rockwell Hardness	R125 / -	-	ASTM D 785
Notched Impact Strength (Izod), 1/8 in	85 / 75	J/m	ASTM D 256
Impact Strength (Izod), 1/8 in	1000 / -	J/m	ASTM D 256
Thermal Properties	dry / cond	Unit	Test Standard
ISO Data			
Melting Temperature (10°C/min)	310 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	277 / *	°C	ISO 75-1/-2
ASTM Data			
UL 94 Flame rating	HB	-	UL 94
Thickness tested	3.2	mm	-
Melting Temperature	310	°C	ASTM D 3418
Electrical Properties	dry / cond	Unit	Test Standard
ASTM Data			
Dielectric Strength, Short Time	21 / 21	kV/mm	ASTM D 149
Dissipation Factor, 60 Hz	0.005 / 0.009	-	ASTM D 150
Dissipation Factor, 1 MHz	0.017 / 0.022	-	ASTM D 150
Dielectric Constant, 60 Hz	4.4 / 4.7	-	ASTM D 150
Dielectric Constant, 1 MHz	4.2 / 4.3	-	ASTM D 150
Volume Resistivity	0 / >1E15	Ohm*cm	ASTM D 257
Arc Resistance	140 / 120	s	ASTM D 495
Other Properties	dry / cond	Unit	Test Standard
ISO Data			
Density	1440 / -	kg/m³	ISO 1183
Optical Properties	Value	Unit	Test Standard
ASTM Data			
Light Transmittance	35	%	ASTM D 1003
Processing Recommendation Injection Molding	Value	Unit	Test Standard
Pre-drying - Temperature	120	°C	-
Pre-drying - Time	4	h	-
Processing humidity	≤0.045	%	-
Melt temperature	321 - 343	°C	-
Mold temperature	135	°C	-
Feed temperature	79	°C	-
Zone 1	304 - 318	°C	-

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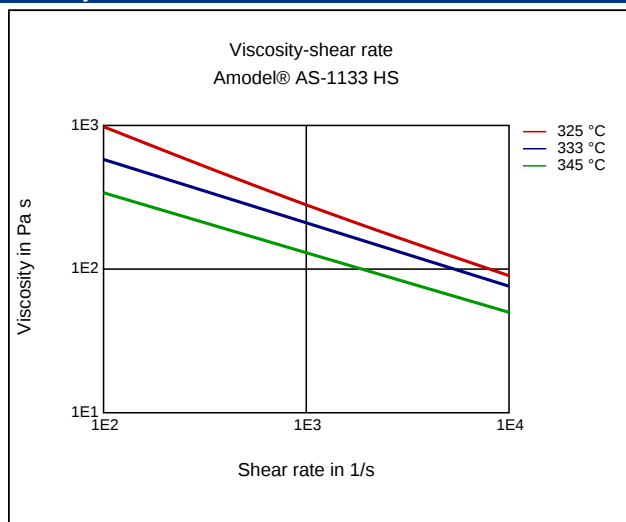
Zone 2

316 - 329 °C

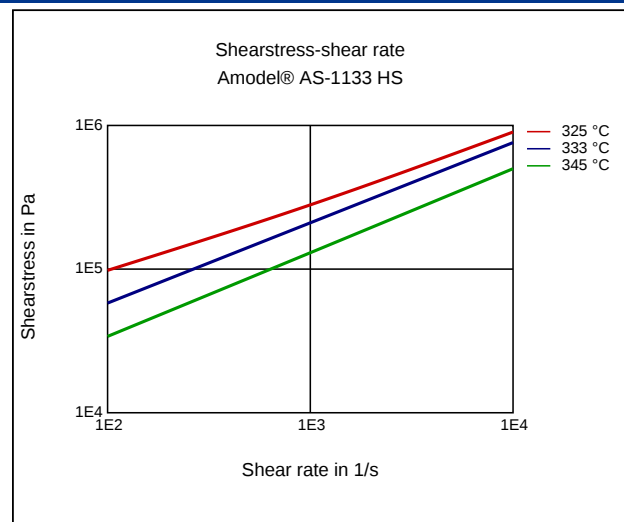
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Diagrams

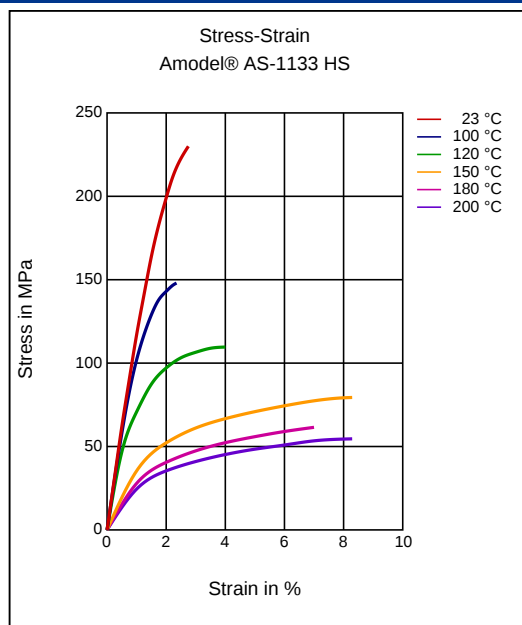
Viscosity-shear rate



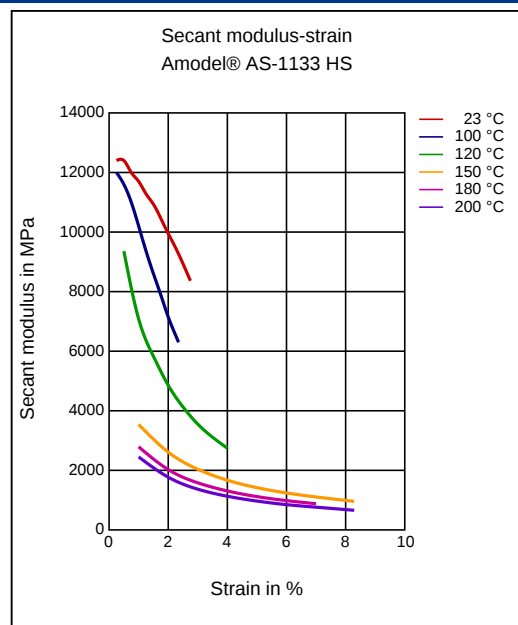
Shearstress-shear rate



Stress-strain



Secant modulus-strain



Characteristics

Processing

Injection Molding

Delivery form

Pellets, Black, Natural Color

Special Characteristics

Heat aging stabilized

Features

Creep Resistance

Chemical Resistance

General Chemical Resistance, Oil Resistance

Applications

Automotive, IT / Business Machine, Electrical and Electronical, General Purpose