

**Akulon® K222-KGMV14**

PA6-(GF+MD)25 FR(30)

DSM Engineering Plastics

Product Texts

5% Glass Reinforced, 20% Mineral Reinforced, Heat Stabilized, Flame Retardant (halogen- phosphorous-free)

ISO 1043 PA6-(GF+MD)25 FR(30)

[Akulon website](#)

Rheological properties	dry / cond	Unit	Test Standard
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ISO Data

Molding shrinkage, parallel	0.6 / *	%	ISO 294-4, 2577
Molding shrinkage, normal	1.0 / *	%	ISO 294-4, 2577

Mechanical properties	dry / cond	Unit	Test Standard
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ISO Data

Tensile Modulus	7000 / 3000	MPa	ISO 527-1/-2
Stress at break	90 / 45	MPa	ISO 527-1/-2
Strain at break	2.5 / 25	%	ISO 527-1/-2
Charpy impact strength (+23°C)	40 / 50	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	35 / 35	kJ/m ²	ISO 179/1eU
Charpy notched impact strength (+23°C)	3 / 7	kJ/m ²	ISO 179/1eA
Charpy notched impact strength, -30°C	3 / 3	kJ/m ²	ISO 179/1eA

Thermal properties	dry / cond	Unit	Test Standard
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ISO Data

Melting temperature (10°C/min)	220 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	190 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	210 / *	°C	ISO 75-1/-2
Burning behav. at 1.5 mm nom. thickn.	V-2 / *	class	IEC 60695-11-10
Thickness tested	1.5 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-
Burning behav. at thickness h	V-2 / *	class	IEC 60695-11-10
Thickness tested	0.8 / *	mm	IEC 60695-11-10
UL recognition	UL / *	-	-

Electrical properties	dry / cond	Unit	Test Standard
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ISO Data

Relative permittivity, 100Hz	4.2 / 10	-	IEC 60250
Relative permittivity, 1MHz	3.8 / 3.9	-	IEC 60250
Dissipation factor, 100Hz	90 / 3000	E-4	IEC 60250
Dissipation factor, 1MHz	190 / 1000	E-4	IEC 60250
Volume resistivity	1E13 / 1E11	Ohm*m	IEC 60093
Surface resistivity	* / 1E14	Ohm	IEC 60093
Electric strength	30 / 25	kV/mm	IEC 60243-1
Comparative tracking index	475 / 475	-	IEC 60112

Other properties	dry / cond	Unit	Test Standard
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ISO Data

Water absorption	6.8 / *	%	Sim. to ISO 62
Humidity absorption	2 / *	%	Sim. to ISO 62
Density	1360 / -	kg/m ³	ISO 1183

Rheological calculation properties	Value	Unit	Test Standard
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ISO Data

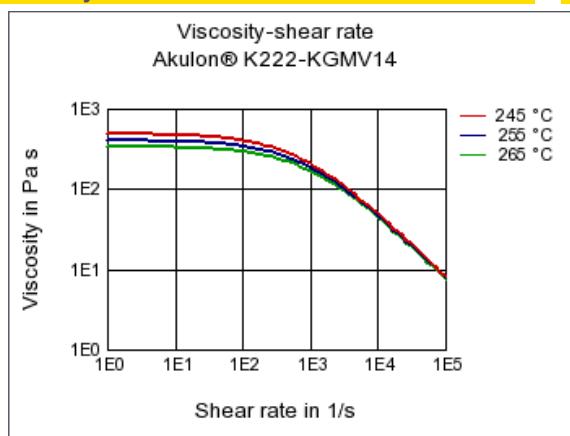
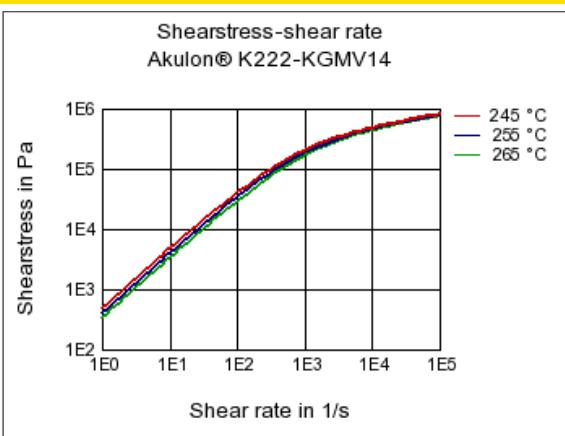
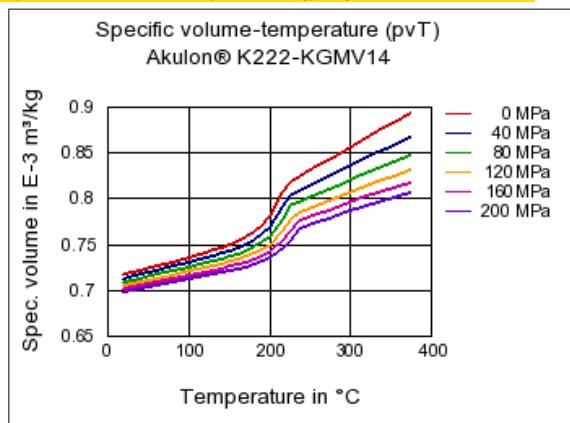
Density of melt	1160	kg/m ³	-
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Thermal conductivity of melt	0.33	W/(m K)	-
Spec. heat capacity of melt	2190	J/(kg K)	-
Eff. thermal diffusivity	1.28E-7	m ² /s	-

Diagrams**Viscosity-shear rate****Shearstress-shear rate****Specific volume-temperature (pvT)****Characteristics****Processing**

Injection Molding

Additives

Release agent

Delivery form

Pellets

Special Characteristics

Flame retardant, Heat stabilized or stable to heat

Other text information**Injection Molding**[Injection Molding Recommendations](#)