

Akulon® K222-D

Polyamide 6
DSM Engineering Plastics

Message:

Akulon® K222-D is a Polyamide 6 (Nylon 6) material. It is available in Asia Pacific, Europe, or North America.
Important attributes of Akulon® K222-D are:
Flame Rated
Low Viscosity

General Information				
UL YellowCard		E43392-235086	E47960-240087	
Features		Low Viscosity		
Forms		Pellets		
Multi-Point Data		Creep Modulus vs. Time (ISO 11403-1)		
		Isochronous Stress vs. Strain (ISO 11403-1)		
		Isothermal Stress vs. Strain (ISO 11403-1)		
		Secant Modulus vs. Strain (ISO 11403-1)		
		Shear Modulus vs. Temperature (ISO 11403-1)		
		Specific Volume vs Temperature (ISO 11403-2)		
		Viscosity vs. Shear Rate (ISO 11403-2)		
Physical	Dry	Conditioned	Unit	Test Method
Density	1.13	--	g/cm³	ISO 1183
Water Absorption				ISO 62
Saturation, 23°C	9.0	--	%	
Equilibrium, 23°C, 50% RH	2.5	--	%	
Mechanical	Dry	Conditioned	Unit	Test Method
Tensile Modulus	3800	1200	MPa	ISO 527-2
Tensile Stress (Yield)	95.0	55.0	MPa	ISO 527-2
Tensile Strain (Yield)	3.5	25	%	ISO 527-2
Nominal Tensile Strain at Break	15	> 50	%	ISO 527-2
Flexural Modulus	2600	--	MPa	ISO 178
Flexural Stress	100	--	MPa	ISO 178
Impact	Dry	Conditioned	Unit	Test Method
Charpy Notched Impact Strength				ISO 179/1eA
-30°C	4.0	4.0	kJ/m²	
23°C	8.0	35	kJ/m²	
Charpy Unnotched Impact Strength				ISO 179/1eU

-30°C	No Break	No Break		
23°C	No Break	No Break		
Thermal	Dry	Conditioned	Unit	Test Method
Heat Deflection Temperature				
0.45 MPa, Unannealed	150	--	°C	ISO 75-2/B
1.8 MPa, Unannealed	60.0	--	°C	ISO 75-2/A
Melting Temperature ¹	220	--	°C	ISO 11357-3
CLTE				ISO 11359-2
Flow	9.0E-5	--	cm/cm/°C	
Transverse	9.0E-5	--	cm/cm/°C	
Electrical	Dry	Conditioned	Unit	Test Method
Surface Resistivity	--	1.0E+14	ohms	IEC 60093
Volume Resistivity	1.0E+15	1.0E+12	ohms·cm	IEC 60093
Electric Strength	25	20	kV/mm	IEC 60243-1
Relative Permittivity				IEC 60250
100 Hz	3.20	14.0		
1 MHz	3.00	4.50		
Dissipation Factor				IEC 60250
100 Hz	5.0E-3	0.30		
1 MHz	0.015	0.12		
Comparative Tracking Index	--	600	V	IEC 60112
Flammability	Dry	Conditioned	Unit	Test Method
Flammability Classification				IEC 60695-11-10, -20
1.50 mm	V-2	--		
3.00 mm	V-2	--		
Oxygen Index	26	--	%	ISO 4589-2
Injection	Dry	Unit		
Drying Temperature	80.0		°C	
Drying Time	4.0 to 8.0		hr	
Rear Temperature	230 to 235		°C	
Middle Temperature	235 to 250		°C	
Front Temperature	240 to 260		°C	
Nozzle Temperature	240 to 270		°C	
Processing (Melt) Temp	240 to 275		°C	
Mold Temperature	50.0 to 80.0		°C	
Injection Rate	Moderate-Fast			
Back Pressure	3.00 to 10.0		MPa	
Screw Compression Ratio	2.5:1.0			
NOTE				
1.	10°C/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

