

**Akulon® S227-C**

PA66

DSM Engineering Plastics

Product Texts

Medium Viscosity, Lubricated

ISO 1043 PA66

[Akulon website](#)

Mechanical properties	dry / cond	Unit	Test Standard
-----------------------	------------	------	---------------

ISO Data

Tensile Modulus	3000 / -	MPa	ISO 527-1/-2
Yield stress	80 / -	MPa	ISO 527-1/-2
Yield strain	4 / -	%	ISO 527-1/-2
Nominal strain at break	50 / -	%	ISO 527-1/-2
Charpy impact strength (+23°C)	N / -	kJ/m ²	ISO 179/1eU
Charpy impact strength, -30°C	N / -	kJ/m ²	ISO 179/1eU

Thermal properties	dry / cond	Unit	Test Standard
--------------------	------------	------	---------------

ISO Data

Melting temperature (10°C/min)	260 / *	°C	ISO 11357-1/-3
Temp. of deflection under load (1.80 MPa)	70 / *	°C	ISO 75-1/-2
Temp. of deflection under load (0.45 MPa)	215 / *	°C	ISO 75-1/-2
Coeff. of linear therm. expansion, parallel	90 / *	E-6/K	ISO 11359-1/-2
Coeff. of linear therm. expansion, normal	90 / *	E-6/K	ISO 11359-1/-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

Electrical properties	dry / cond	Unit	Test Standard
-----------------------	------------	------	---------------

ISO Data

Relative permittivity, 100Hz	3.4 / -	-	IEC 60250
Relative permittivity, 1MHz	3.2 / -	-	IEC 60250
Dissipation factor, 100Hz	90 / -	E-4	IEC 60250
Dissipation factor, 1MHz	220 / -	E-4	IEC 60250
Volume resistivity	1E13 / -	Ohm*m	IEC 60093
Electric strength	25 / -	kV/mm	IEC 60243-1

Other properties	dry / cond	Unit	Test Standard
------------------	------------	------	---------------

ISO Data

Water absorption	9 / *	%	Sim. to ISO 62
Humidity absorption	2.5 / *	%	Sim. to ISO 62
Density	1140 / -	kg/m ³	ISO 1183

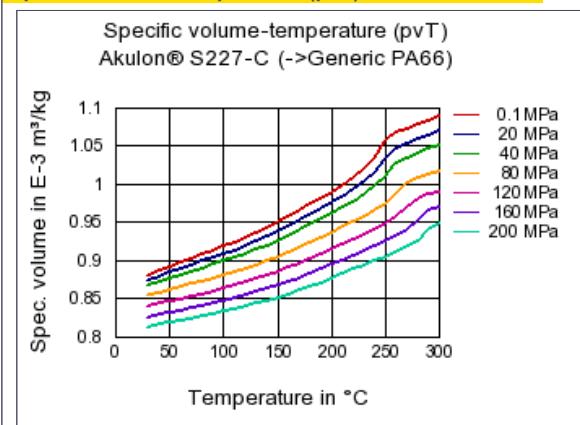
Material specific properties	dry / cond	Unit	Test Standard
------------------------------	------------	------	---------------

ISO Data

Viscosity number	180 / *	cm ³ /g	ISO 307, 1157, 1628
------------------	---------	--------------------	---------------------

Diagrams

Specific volume-temperature (pvT)



Characteristics

Processing

Injection Molding, Film Extrusion, Profile Extrusion, Other Extrusion

Additives

Lubricants

Delivery form

Pellets

Other text information

Injection Molding

[Injection Molding Recommendations](#)

Film extrusion

[Processing of Akulon film grades](#)