



Monday, October 08, 2007

Arnite® AV2 360 S

DSM Engineering Plastics - *Polyethylene Terephthalate*

Unit System: English

Actions

[Legend \(Open\)](#)



General Information

General

Material Status	● Commercial: Active
Availability	● Europe
Test Standards Available	● ISO ● ISO 10350
Filler / Reinforcement	● Glass fiber reinforcement, 33 % Filler by Weight
Additive	● Ignition Resistant ● Mold Release
Features	● Flame Retardant
RoHS Compliance	● Contact Manufacturer
Forms	● Pellets
Processing Method	● Injection Molding
Multi-Point Data	● Isochronous Stress vs. Strain (ISO 11403-1) ● Shear Modulus vs. Temperature (ISO 11403-2) ● Isothermal Stress vs. Strain (ISO 11403-1) ● Viscosity vs. Shear Rate (ISO 11403-2) ● Secant Modulus vs. Strain (ISO 11403-1)

ASTM and ISO Properties ¹

Physical	Nominal Value	Unit	Test Method
Density	1.73	g/cm ³	ISO 1183
Density	0.0625	lb/in ³	ISO 1183 ²
Molding shrinkage (parallel)	0.15	%	ISO 2577 ²
Molding shrinkage (normal)	1.5	%	ISO 2577 ²
Water Absorption Sat/23C	0.40	%	ISO 62
Water absorption	0.40	%	ISO 62 ²
Water Absorption 23C/50RH	0.12	%	ISO 62
Humidity absorption	0.12	%	ISO 62 ²
Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	1.89E+6	psi	ISO 527-1, -2
Tensile modulus	1.89E+6	psi	ISO 527-1, -2 ²
Tensile Stress at Break	23900	psi	ISO 527-1, -2
Stress at break	24000	psi	ISO 527-1, -2 ²
Tensile Strain at Break	2.0	%	ISO 527-1, -2
Strain at break	2.0	%	ISO 527-1, -2 ²
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength ³			ISO 179
(-22 °F)	4.76	ft-lb/in ²	
(73 °F)	4.76	ft-lb/in ²	
Charpy notched impact strength (+23°C)	4.76	ft-lb/in ²	ISO 179 /1eA ²
Charpy notched impact strength (-30°C)	4.76	ft-lb/in ²	ISO 179 /1eA ²
Charpy Unnotched Impact Strength ⁴			ISO 179
(-22 °F)	19.0	ft-lb/in ²	
(73 °F)	19.0	ft-lb/in ²	
Charpy impact strength (+23°C)	19.0	ft-lb/in ²	ISO 179 /1eU ²
Charpy impact strength (-30°C)	19.0	ft-lb/in ²	ISO 179 /1eU ²
Thermal	Nominal Value	Unit	Test Method
HDT B (0.45 MPa) Unannealed	482	°F	ISO 75B-1, -2
Temp. of deflection under load (0.45 MPa)	482	°F	ISO 75-1, -2 ²
HDT A (1.80 MPa) Unannealed	455	°F	ISO 75A-1, -2
Temp. of deflection under load (1.80 MPa)	455	°F	ISO 75-1, -2 ²

Melting temperature (10°C/min)	491 °F	ISO 11357-1, -3 ²
Coefficient of Linear Thermal Expansion, Flow	0.000011 in/in/°F	ISO 11359-1, -2
Coeff.of linear therm. expansion (parallel)	0.000011 in/in/°F	ISO 11359-1, -2 ²
Coefficient of Linear Thermal Expansion, Transverse	0.000036 in/in/°F	ISO 11359-1, -2
Coeff.of linear therm. expansion (normal)	0.000036 in/in/°F	ISO 11359-1, -2 ²
Electrical	Nominal Value Unit	Test Method
Surface Resistivity	1.0E+15 ohms	IEC 60093
Surface resistivity	> 1.0E+15 ohms	IEC 60093 ²
Volume Resistivity	1.0E+15 ohm-cm	IEC 60093
Volume resistivity	> 3.9E+14 ohm-in	IEC 60093 ²
Relative permittivity (100 Hz)	3.70	IEC 60250 ²
Relative permittivity (1 MHz)	3.40	IEC 60250 ²
Dissipation Factor		IEC 60250
(100 Hz)	0.00100	
(1E+6 Hz)	0.0120	
Dissipation factor (100 Hz)	0.0010	IEC 60250 ²
Dissipation factor (1 MHz)	0.012	IEC 60250 ²
Comp Track Index	230 V	IEC 60112
Comparative tracking index	225	IEC 60112 ²
Electric Strength	740 V/mil	IEC 60243-1
Electric strength	740 V/mil	IEC 60243-1 ²
Relative Permittivity		IEC 60250
(100 Hz)	3.70	
(1E+6 Hz)	3.40	
Flammability	Nominal Value Unit	Test Method
Burning Behav. at 1.6mm nom. thickn. (0.06 in, UL)	V-0	ISO 1210 ²
Burning Behav. at thickness h (0.0280 in, UL)	V-2	ISO 1210 ²
Flammability Classification		IEC 60695-11-10, -20
(0.0280 in)	V-2	
(0.0591 in)	V-0	
Oxygen Index	36 %	ISO 4589-1, -2
Oxygen index	36 %	ISO 4589-1, -2 ²

Additional Properties

Surface Resistivity, IEC 60093: >1e15 ohms
Volume Resistivity, IEC 60093: >1e13 ohm-m

Notes

- 1 Typical properties: these are not to be construed as specifications.
- 2 Tested in accordance with ISO 10350. 23°C/50%r.h. unless otherwise noted.
- 3 Type 1, Edgewise, Notch A
- 4 Type 1, Edgewise

Powered by  Copyright © 2007 [IDES - The Plastics Web®](http://www.ides.com)

The information presented on this data sheet was acquired by IDES from various sources, including the producer of the material and recognized testing agencies. In some cases, material updates have been integrated directly into the IDES Plastics Database by the material producer utilizing the Data Maintenance Tool. IDES makes substantial efforts to assure the accuracy of this data. However, IDES assumes no responsibility for the data values and urges that upon final material selection, data points are validated with the manufacturer.

Need to find a distributor for this plastic?

Visit www.ides.com/sourcing for more info!

Don't have a Prospector account?

Get one today at www.ides.com/pse!