Datasheet
Durethan AM230ZH3.0 000000

PA 66, 30% mineral, injection molding, improved impact strength, heat-aging stabilized, low tendency to warp

ISO Shortname: ISO 16396-PA 66,MD30,GHR,S14-040

Property	Test Condition	Unit	Standard	guide value [1] d.a.m.	guide value [1] cond.
Rheological properties					
C Molding shrinkage, parallel	60x60x2; 290 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.7	
C Molding shrinkage, transverse	60x60x2; 290 °C / MT 80 °C; 600 bar	%	ISO 294-4	1.6	
Post- shrinkage, parallel	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.15	
Post- shrinkage, transverse	60x60x2; 120 °C; 4 h	%	ISO 294-4	0.15	
Mechanical properties (23 °C/50 % r. h.)					
C Tensile modulus	1 mm/min	MPa	ISO 527-1,-2	3700	
C Tensile Stress at break	5 mm/min	MPa	ISO 527-1,-2	60	
C Tensile Strain at break	5 mm/min	%	ISO 527-1,-2	15	
C Charpy impact strength	23 °C	kJ/m²	ISO 179-1eU	250	
C Charpy impact strength	-30 °C	kJ/m²	ISO 179-1eU	200	
C Charpy notched impact strength	23 °C	kJ/m²	ISO 179-1eA	10	
C Charpy notched impact strength	-30 °C	kJ/m²	ISO 179-1eA	<10	
Izod impact strength	23 °C	kJ/m²	ISO 180-1U	200	
Izod impact strength	-30 °C	kJ/m²	ISO 180-1U	170	
Izod notched impact strength	23 °C	kJ/m²	ISO 180-1A	10	
Izod notched impact strength	-30 °C	kJ/m²	ISO 180-1A	<10	
Flexural modulus	2 mm/min	MPa	ISO 178-A	3600	
Flexural strength	2 mm/min	MPa	ISO 178-A	105	
Flexural strain at flexural strength	2 mm/min	%	ISO 178-A	5	
C Puncture maximum force	23 °C	N	ISO 6603-2	5200	
C Puncture maximum force	-30 °C	N	ISO 6603-2	4200	
C Puncture energy	23 °C	J	ISO 6603-2	34	
C Puncture energy	-30 °C	J	ISO 6603-2	17	
Thermal properties					
C Temperature of deflection under load	1.80 MPa	°C	ISO 75-1,-2	75	
C Temperature of deflection under load	0.45 MPa	°C	ISO 75-1,-2	190	
Other properties (23 °C)					
C Density		kg/m³	ISO 1183	1335	
Bulk density		kg/m³	ISO 60	700	
Processing conditions for test specimens					
C Injection molding-Melt temperature		°C	ISO 294	290	
C Injection molding-Mold temperature		°C	ISO 294	80	

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Property	Test Condition	Unit	Standard	guide value [1] d.a.m.	guide value [1] cond.
Processing recommendations					
Drying temperature dry air dryer		°C	-	80	
Drying time dry air dryer		h	-	4	
Residual moisture content		%	Acc. to Karl Fischer	0.03-0.12	
Melt temperature (Tmin - Tmax)		°C	-	280-300	
Mold temperature		°C	-	80-100	

Notes

1 Typical properties: these are not to be construed as specifications

C These property characteristics are taken from the CAMPUS plastics data bank and are based on the international catalogue of basic data for plastics according to ISO 10350.

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Typical Properties

Property data is provided as general information only. Property values are approximate and are not part of the product specifications.

Flammability

Flammability results are based on small-scale laboratory tests for purposes of relative comparison and are not intended to reflect the hazards presented by this or any other material under actual fire conditions.

Health and Safety

Appropriate literature has been assembled which provides information concerning the health and safety precautions that must be observed when handling Envalior products mentioned in this publication. Before working with these products, you must read and become familiar with the available information on their hazards, proper use, and handling. This cannot be overemphasized. Information is available in several forms, e.g., material safety data sheets (MSDS) and product labels. Consult your Envalior representative or contact the Product Safety and Regulatory Affairs Department. For materials that are not Envalior products, appropriate industrial hygiene and other safety precautions recommended by their manufacturer(s) must be followed.

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Color and Visual Effects

Type and quantity of pigments or additives used to obtain certain colors and special visual effects can affect mechanical properties.