VESTAMID® Care ML24

Polyamide 12

Evonik Industries AG

Message:

VESTAMID®Care ML grades cover a range of polyamide 12 resins of different viscosity for processing via extrusion or injection molding. The VESTAMID®Care ML product range consists of unstabilized base resins as well as stabilized or reinforced compounds.
VESTAMID® Care ML resins are characterized by several outstanding properties, such as high impact & notched impact resistance, dimensional stability, good sliding properties, high abrasion resistance and resistance against chemicals.
Unfilled VESTAMID® Care ML grades are for example the materials of choice for catheters and tubings, where VESTAMID® Care ML materials meet even highest challenges in applications such as angioplasty balloon catheters.
Typical areas of application for reinforced VESTAMID® Care ML grades include housing-parts, monitoring and imaging devices and durable medical equipment. Due to their low water uptake, filled VESTAMID® Care ML grades even resist steam autoclaving for more than 500 cycles. The advantages at a glance :
High impact resistance
High dimensional stability
High chemical resistance
Low sliding friction
High toughness
High abrasion resistance
Easy processability & colorability

General Information	
Features	Biocompatible
	Good Abrasion Resistance
	Good Chemical Resistance
	Good Colorability
	Good Dimensional Stability
	Good Impact Resistance
	Good Processability
	Good Toughness
	Low Friction
Uses	Medical Devices
	Medical/Healthcare Applications
	Tubing
Agency Ratings	ISO 10993
	USP 88
	USP Class VI
Processing Method	Extrusion
	Injection Molding

Physical	Nominal Value	Unit	Test Method
Density (23°C)	1.01	g/cm³	ISO 1183

Molding Shrinkage			ISO 294-4
Across Flow : 2.00 mm	1.3	%	
Flow : 2.00 mm	0.65	%	
Water Absorption			ISO 62
Saturation, 23°C	1.6	%	
Equilibrium, 23°C, 50% RH	0.70	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1400	MPa	ISO 527-2
Tensile Stress (Yield, 23°C)	47.0	MPa	ISO 527-2
Tensile Strain (Yield, 23°C)	5.0	%	ISO 527-2
Nominal Tensile Strain at Break (23°C)	> 50	%	ISO 527-2
Impact	**Nominal Value**	**Unit**	**Test Method**
Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	9.0	kJ/m^2	
23°C, Complete Break	16	kJ/m^2	
Charpy Unnotched Impact Strength			ISO 179/1eU
-30°C	No Break		
23°C	No Break		
Thermal	**Nominal Value**	**Unit**	**Test Method**
Heat Deflection Temperature			
0.45 MPa, Unannealed	110	°C	ISO 75-2/B
1.8 MPa, Unannealed	50.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	170	°C	ISO 306/A
--	140	°C	ISO 306/B
Melting Temperature (DSC) [1]	178	°C	ISO 11357
CLTE - Flow (23 to 55°C)	1.4E-4	cm/cm/°C	ISO 11359-2
Flammability	**Nominal Value**		**Test Method**
Flame Rating			UL 94
1.60 mm	HB		
3.20 mm	HB		
NOTE			
1.	2nd Heating		

Recommended distributors for this material

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