

VESTAMID® E EX9200

Polyamide 12
Evonik Industries AG

Message:

Typical Applications: decorative and protective films
PA 12 elastomers, the most important subgroup of polyamide elastomers, belong to the increasingly important material class of thermoplastic elastomers (TPE). Because of their excellent properties, they are indispensable in many applications.
PA 12 elastomers are block copolymers consisting of PA 12 segments and polyether segments. PA 12-rich products have the major properties of PA 12, while the elastomer characteristics become more apparent with increasing polyether content. That is the polymers become more flexible, with higher impact strength at cold temperatures.

General Information			
Additive	Heat Stabilizer		
	UV Stabilizer		
Features	Block Copolymer		
	Excellent Printability		
	Good Chemical Resistance		
	Good Colorability		
	Good Processability		
	Heat Stabilized		
	High Elasticity		
	Light Stabilized		
	Low Density		
	Low Temperature Impact Resistance		
Uses	Solvent Resistant		
	Film		
	Black		
Appearance	Colors Available		
	Natural Color		
	Granules		
Forms	Extrusion		
Processing Method	Injection Molding		
Physical	Nominal Value	Unit	Test Method
Density	1.01	g/cm³	ISO 1183
Water Absorption (Saturation, 23°C)	1.5	%	ISO 62
Viscosity Number	190	cm³/g	ISO 307
Hardness	Nominal Value	Unit	Test Method
Shore Hardness (Shore D)	68		ISO 868

Mechanical	Nominal Value	Unit	Test Method
Tensile Modulus	700	MPa	ISO 527-2
Tensile Stress			ISO 527-2
Yield	31.0	MPa	
50% Strain	27.0	MPa	
Tensile Strain			ISO 527-2
Yield	19	%	
Break	> 200	%	
Impact	Nominal Value	Unit	Test Method
Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	6.0	kJ/m ²	
23°C, Partial Break	33	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	100	°C	ISO 75-2/B
1.8 MPa, Unannealed	45.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	170	°C	ISO 306/A
--	130	°C	ISO 306/B
CLTE			ISO 11359-2
Flow : 23 to 55°C	1.6E-4	cm/cm/°C	
Transverse : 23 to 55°C	1.6E-4	cm/cm/°C	
Electrical	Nominal Value	Unit	Test Method
Surface Resistivity	1.0E+13	ohms	IEC 60093
Volume Resistivity	1.0E+11	ohms · cm	IEC 60093
Electric Strength	30	kV/mm	IEC 60243-1
Relative Permittivity			IEC 60250
23°C, 100 Hz	7.40		
23°C, 1 MHz	4.60		
Dissipation Factor			IEC 60250
23°C, 100 Hz	0.15		
23°C, 1 MHz	0.076		
Comparative Tracking Index (Solution A)	600	V	IEC 60112
Flammability	Nominal Value	Unit	Test Method
Flame Rating (1.60 mm)	HB		UL 94
Injection	Nominal Value	Unit	
Suggested Max Moisture	0.10	%	
Processing (Melt) Temp	190 to 230	°C	
Mold Temperature	20.0 to 40.0	°C	

Extrusion	Nominal Value	Unit
Suggested Max Moisture	0.10	%
Melt Temperature	200 to 240	°C

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

