VESTAMID® NRG 2901 black

Polyamide 12

Evonik Industries AG

Message:

For gas pipe fittings
VESTAMID® NRG 2901 is a high molecular, heat stabilized compound with exceptional mold release properties. Additionally, VESTAMID®NRG 2901 is nucleated to reduce the cycle time and shrinkage of molded parts.
Generally mechanical properties of compounds based on PA 12 vary little with changing humidity due to their low-moisture absorption.
Parts made of this semi-crystalline material are characterized by exceptional impact strength, high abrasion resistance, low friction and good chemical resistance.
We recommend a processing temperature between 230°C (446°F) and 260°C (500°F) - in some cases up to 280°C (536°F) - during the injection molding process.The mold temperature should be within a range of 60°C (140°F) to 100°C (212°F).
Drying at 80°C (176°F) for 2 hours to 4 hours before processing is recommended.
Polyamide 12 is a high performance thermoplastic polymer with increased performance characteristics that translates into safe operations over the life of the installed pipeline.
It has a considerable record of safe and proven experience in many demanding applications, including fuel lines in passenger cars, air brake tubing in trucks and off-shore applications.

General Information			
Additive	Heat Stabilizer		
Features	Good Abrasion Resistance Good Chemical Resistance Good Impact Resistance Good Mold Release Heat Stabilized High Molecular Weight Low Friction Low Moisture Absorption Semi Crystalline		
Appearance	Black		
Processing Method	Injection Molding		
Physical	**Nominal Value**	**Unit**	**Test Method**
Density (23°C)	1.01	g/cm³	ISO 1183
Molding Shrinkage			ISO 294-4
Across Flow : 80°C, 2.00 mm	1.2	%	
Flow : 80°C, 2.00 mm	0.67	%	
Mechanical	**Nominal Value**	**Unit**	**Test Method**
Tensile Modulus	1500	MPa	ISO 527-2
Tensile Stress (Yield)	45.0	MPa	ISO 527-2
Tensile Strain			ISO 527-2
Yield	5.0	%	
Break	> 50	%	
Impact	**Nominal Value**	**Unit**	**Test Method**

Charpy Notched Impact Strength			ISO 179/1eA
-30°C, Complete Break	7.0	kJ/m²	
23°C, Complete Break	7.0	kJ/m²	
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	140	°C	ISO 75-2/B
1.8 MPa, Unannealed	50.0	°C	ISO 75-2/A
Vicat Softening Temperature			
--	175	°C	ISO 306/A
--	150	°C	ISO 306/B
Injection	**Nominal Value**	**Unit**	
Drying Temperature	80.0	°C	
Drying Time	2.0 to 4.0	hr	
Processing (Melt) Temp	230 to 280	°C	
Mold Temperature	60.0 to 100	°C	

Recommended distributors for this material

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