

Product Information

VESTAMID® NRG 2901 black

For Gas Pipes 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 thermo plastic 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.

For information about processing of VESTAMID®NRG 2901 please follow the general recommendation in our brochure „VESTAMID® Processing Guide Line.“

For further information, please contact us at evonik-hp@evonik.com.

Property	Test method		Unit	VESTAMID® NRG 2901 black	
	international	national			
Density	23°C / 73°F	ISO 1183	DIN EN ISO 1183	g/cm³	1.01
Tensile test	ISO 527-1	DIN EN ISO 527-1			
Stress at yield	ISO 527-2	DIN EN ISO 527-2	MPa	45	
Strain at yield			%	5	
Strain at break			%	> 50	
Tensile modulus	ISO 527-1	DIN EN ISO 527-1	MPa	1500	
	ISO 527-2	DIN EN ISO 527-2			
CHARPY impact strength	ISO 179/1eU	DIN EN ISO 179/1eU			
23°C / 73°F			kJ/m²	N ¹⁾	
-30°C / -22°F			kJ/m²	N ¹⁾	
CHARPY notched impact strength	ISO 179/1eA	DIN EN ISO 179/1eA			
23°C / 73°F			kJ/m²	7 C ¹⁾	
-30°C / -22°F			kJ/m²	7 C ¹⁾	
Temperature of deflection under load	ISO 75-1	DIN EN ISO 75-1			
	ISO 75-2	DIN EN ISO 75-2			
Method A	1.8 MPa		°C / °F	50 / 122	
Method B	0.45 MPa		°C / °F	140 / 284	
Vicat softening temperature	ISO 306	DIN EN ISO 306			
Method A	10 N		°C / °F	175 / 347	
Method B	50 N		°C / °F	150 / 302	
Mold shrinkage	determined on 2 mm sheets				
in flow direction	with film gate at rim		%	0.67	
in transverse direction	mold temperature 80°C / 176°F		%	1.15	
	ISO 294-4				

¹⁾ C = Complete break, incl. hinge break H
N = No break

The results shown have been generated from a low number of production lots. Therefore, they are preliminary and not yet the result of a statistical evaluation. Therefore they must not be used to establish specifications.

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