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 pipe-line.
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 international	national	Unit	VESTAMID® NRG 2901 black
Density	23°C /73°F	ISO 1183	DIN EN ISO 1183	g/cm³	1.01
Tensile test		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2		
Stress at yield				MPa	45
Strain at yield				%	5
Strain at break				%	> 50
Tensile modulus		ISO 527-1 ISO 527-2	DIN EN ISO 527-1 DIN EN ISO 527-2	MPa	1500
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 ISO 75-2	DIN EN ISO 75-1 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 with film gate at rim mold temperature 80°C /176°F ISO 294-4			
	in flow direction			%	0.67
	in transverse direction			%	1.15

[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.

® = registered trademark

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