

Product Information

# VESTAMID® NRG 1902 BK

## HIGH-VISCOSITY, PLASTICIZED, IMPACT- MODIFIED, HEAT- AND LIGHT-STABILIZED PA12 COMPOUND FOR EXTRUSION



**VESTAMID® NRG 1902 BK** is a high-viscosity, plasticized and impact-modified PA 12 compound with heat and light stabilizers for the extrusion of flexible tubing and hoses especially for oil and petrochemical applications.

VESTAMID® NRG 1902 BK is characterized by easy processing and good dimensional control during pipe extrusion, especially when processing large pipe diameters.

Properties of compounds based on polyamide 12 vary little with changing humidity due to low moisture absorption.

Parts made of the described semi-crystalline material are characterized by exceptional impact strength, low coefficient of sliding friction and good chemical resistance.

The recommended process temperature for extrusion is 220°C to 250°C.

VESTAMID® NRG 1902 BK is supplied ready for use in moisture-proof bags.

Inside the original and undamaged packaging, the product has a shelf life of at least 2 years when stored in dry rooms at temperatures not exceeding 30°C.

### Key Features

#### Industrial Sector

Sustainable, Energy, Oil and Gas

#### Sustainability

Sustainable electricity

#### Delivery form

Pellets, Granules

#### Resistance to

Hydrolysis / hot water, UV / light / weathering, Oil / fuels

#### Additives

Unfilled

VESTAMID® NRG

LCA-values	dry	Unit	Test Standard
LCA name of certificate	<a href="#">VESTAMID® L Compound medium</a>	-	ISO 14040, 14044
LCA certifier	<a href="#">TÜV Rheinland</a>	-	ISO 14040, 14044
Blue water consumption	<b>25.6</b>	kg	ISO 14040, 14044
Global Warming Potential incl. bio. C incl. LUC	<b>6.0</b>	kg CO <sub>2</sub> eq./kg	ISO 14040, 14044
Global Warming Potential excl. bio. C incl. LUC	<b>6.0</b>	kg CO <sub>2</sub> eq./kg	ISO 14040, 14044
Land use (ReCiPe 2016)	<b>0.1</b>	Annual crop eq. y	ISO 14040, 14044
GWP savings as compared to 2023 reference	<b>-2.4</b>	kg CO <sub>2</sub> eq./kg	ISO 14040, 14044

Mechanical properties ISO	dry / cond	Unit	Test Standard
Tensile modulus	<b>55800 / -</b>	psi	ISO 527
Tensile strength	<b>6240 / -</b>	psi	ISO 527
Stress at 50% strain	<b>3920 / -</b>	psi	ISO 527
Stress at break	<b>6240 / -</b>	psi	ISO 527
Nominal strain at break, tB	<b>220 / -</b>	%	ISO 527

Test specimen production	dry	Unit	Test Standard
Injection Molding, melt temperature	<b>554</b>	°F	ISO 294
Injection Molding, mold temperature	<b>140</b>	°F	ISO 294
Injection Molding, injection velocity	<b>7.87</b>	in/s	ISO 294

**Characteristics**

**Applications**

Tube and hose

**Special Characteristics**

High impact strength, Semi-crystalline, Light-stabilized, High heat resistant, High viscosity

**Features**

Low coefficient of friction

**Color**

Black

**Additives**

Plasticizer

**Chemical Resistance**

General chemical resistance