



# Nitrogen

(Meets the requirements of DIN EN ISO 14175: N1)



Purity, %:  $\geq 99.8$  (including noble gases)

Type of supply:

**Steel cylinder**

Capacity, [Liter]	Cylinder contents, [m <sup>3</sup> ]	Filling pressure, approx. [bar]	Gross weight approx. [kg]	Outer diameter approx. [mm]	Cylinder length approx. [mm]
10	1.91	200	20	140	975
20	3.81	200	40	204	965
50	9.53	200	80	229	1655
50	13.2	300	90	229	1700

**Cylinder bundle**

Capacity, [Liter]	Cylinder contents, [m <sup>3</sup> ]	Filling pressure, approx. [bar]	number of cylinder in bundle	Gross weight approx. [kg]	Dimension approx. (L x W x H) [mm]
600	114	200	12	1320	1900 x 1000 x 770
600	158	300	12	1460	1900 x 1000 x 770

**LIPAC® duo**

Capacity, [Liter]	Cylinder contents, [m <sup>3</sup> ]	Filling pressure, approx. [bar]	number of cylinder in bundle	Gross weight approx. [kg]	Dimension approx. (L x W x H) [mm]
600	158	300	12	1460	1900 x 1000 x 775

**cryo vessel medium and high pressure**

Capacity, [Liter]	Cylinder contents, [Liter]	Filling pressure, approx. [bar]	Gross weight approx. [kg]	Dimension approx. (L x W x H) [mm]
170	170	9	275 (435 mit Palette)	1562x980x770
600	575	14	1100	1200x800x2000

Additional delivery types on demand.

Conversion factors:

m <sup>3</sup> gas (15°C, 1 bar)	l liquid at T <sub>b</sub>	kg
1	1.447	1.17
0.691	1	0.809
0.855	1.237	1

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To ensure a high level of customer service the customer data, such as Phone number, are stored and processed electronically.

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<b>Identification:</b>	Cylinder shoulder colour/ Circular colour strip at bundles	Black RAL 9005
	Label:	Nitrogen
	Valve outlet:	Filling pressure 200 bar: W 24,32 x 1/14, DIN 477 No. 10 Filling pressure 300 bar: W 30 x 2, ISO 5145 No. 30 LIPAC® duo bundle: 300bar connector according ISO 5145 second connector pressure reduced according DIN 477-1 Because of the necessary high flow rate for laser high pressure cutting the pressure reduced connector (marked with "200bar") on LIPAC® duo is not recommended. Please use for laser high pressure cutting (necessary N2 flow > 80 Nm <sup>3</sup> /h) the 300 bar connector.

**Properties:** compressed gas, suffocating, chemically inert

Chemical symbol:	N <sub>2</sub>
Molar mass:	28.013 g/mol

**Tripel point:**

Temperature	Pressure	Heat of fusion
63.2 K ( °C)	0.1253 bar	25.8 kJ/kg
Relative density based on dry air (15°C, 1 bar):		0.967
Critical temperature:		126.2 K (-146.95 °C)
Boiling point at 1.013 bar (T <sub>b</sub> ):		77.35 K (-195.8 °C)

**Applications:** Shielding gas and welding gas component in metal working industry; shielding gas in chemical and electrical industry; purging gas in metallurgy, electrical industry, for pressure testing of pipes, pipelines and vessels; cutting gas for laser cutting; process gas for plasma cutting; inert gas for industry service

**Also available:** BIOGON® N E941  
BIOGON® N flüssig E941  
EURO 6 Stickstoff 6.0  
Stickstoff 5.0  
Stickstoff 5.3  
Stickstoff 5.5 ECD  
Stickstoff 6.0  
Stickstoff 7.0  
Stickstoff flüssig 2.8  
Stickstoff flüssig 5.0  
Stickstoff flüssig LI-PUR® 5.6  
Stickstoff flüssig LI-PUR® 6.0  
Stickstoff flüssig LI-PUR® 7.0  
VERISEQ® GAN Pharma  
VERISEQ® LIN Pharma

Mixtures with other gases in defined compositions.

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Änderungen vorbehalten

Stand 11.08.2016 - After check still valid unchanged