



Product sheet Nitrogen 3.0

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| Product name | Nitrogen 3.0 |
| Physical state | gaseous, compressed |
| Chemical sign | N ₂ |
| Chemical designation | Nitrogen |
| Purity | 99,9 % |
| Standard | is not subject to any standard - N1 |
| Properties | see safety data sheet |
| Shoulder color | jet black (RAL 9005) |

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|------------------|-----------------|
| Minor components | Maximum values |
| Oxygen | 1000,0 vol. ppm |
| Moisture | 100,0 vol. ppm |

| Name | Material number | Bottle type | Bottle container volume | Vapour/filling pressure | Content | Valve | Properties |
|----------------------------|-----------------|-------------|-------------------------|-------------------------|----------------------|-------------------------------------|------------|
| Nitrogen T05 RCyl | S00300105 | steel | 5,0 l | 200,0 bar | 1,0 m ³ | DIN 477 Nr. 10 W 24,32 x 1/14 | |
| Nitrogen T10 RCyl | S00300110 | steel | 10,0 l | 200,0 bar | 1,9 m ³ | DIN 477 Nr. 10 W 24,32 x 1/14 | |
| Nitrogen T20 RCyl | S00300120 | steel | 20,0 l | 200,0 bar | 3,8 m ³ | DIN 477 Nr. 10 W 24,32 x 1/14 | |
| Nitrogen T50 RCyl | S00300150 | steel | 50,0 l | 200,0 bar | 9,5 m ³ | DIN 477 Nr. 10 W 24,32 x 1/14 | |
| Nitrogen RBundle12 | S00300312 | steel | 600,0 l | 200,0 bar | 114,3 m ³ | DIN 477 Nr. 10 W 24,32 x 1/14 | |
| Nitrogen RBundle12 300 bar | S003003123 | steel | 600,0 l | 300,0 bar | 158,2 m ³ | DIN 477-5 No. 54 CEN Nr. 1 | |

Unless otherwise stated, these refer to filling pressure at 288,15K (15°C) and to content at 288,15K (15°C) and 1,013 bar.



Typical applications

- for plasma cutting
- for inerting
- in the automotive sector
- in gas chromatography
- in metrology

Physical data

| | | |
|-------------------|--|----------------------------|
| operating figures | Molar mass | 28,01 g mol ⁻¹ |
| Liquid State | Heat of Evaporation | 198,70 kJ kg ⁻¹ |
| | Liquid Density | 808,6 kg m ⁻³ |
| Gas State | Thermal Conductivity (at 288.15 K and 1.013 bar) | 0,0250 kg m ⁻³ |
| | Density Ratio to Air (at 288.15 K and 1.013 bar) | 0,97 |
| | Specific heat (at 298.15 K and 1.013 bar) | 1,04 kg m ⁻³ |
| | Density (at 273.15 K and 1.013 bar) | 1,25 kg m ⁻³ |
| Critical Point | Temperature | 126,2 (-147,0) K (°C) |
| | density | 314 kg m ⁻³ |
| | Pressure | 34,00 bar |
| Triple Point | Temperature | 63,2 (-210,0) K (°C) |
| | Vapour Pressure | 0,1253 bar |
| | Heat of Fusion | 25,8 kJ kg ⁻¹ |

All mentioned data, values and notes correspond to actual state of knowledge on the date of printing. They make no claim to be correct or complete and therefore do not release the user from his obligation to check them.

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