

Marking

| | |
|----------------------------------|---|
| CAS-Number | 7727-37-9 |
| Characterization acc. ADR | UN 1066, Nitrogen, compressed, 2.2 Class 2, 1 A |

Cylinder Marking

shoulder:
black

Essential properties

Colourless, odorless, asphyxiating gas, compressed, slightly lighter than air

Symbols of Risks

gas, compressed

Physical Properties

| | |
|-----------------------------------|-------------------------|
| molecular weight: | 28,0134 kg/kmol |
| gas density at 0°C and 1,013 bar: | 1,250 kg/m ³ |
| density ratio to air: | 0,9671 |

For additional safety information see Material-/safety data sheet No. *-N2-089A

Valves / Manifolds

| | |
|------------------------------|---|
| Valve connection | 200 bar: acc. to national standards 300 bar: ISO 5145 No. 1: W 30 x 2 |
| Recommended Manifolds | Spectrolab FM 51 / FM 52exact Spectrocem FE 51 / FE 52exact 300 bar pressure regulator under same designation available |

**Specifications / Forms of delivery**

| | | 5.0 | 5.5 * | ECD | 6.0 | |
|-----------------------------|---|---|--|--|--|----------------|
| Composition | | | | | | |
| N ₂ | > | 99,999 <small>(incl. rare gases)</small> | 99,9995 <small>(incl. rare gases)</small> | 99,9995 <small>(incl. rare gases)</small> | 99,9999 <small>(incl. rare gases)</small> | Vol.-% |
| Impurities | | | | | | |
| H ₂ O | < | 3 | 2 | 2 | 0,5 | ppmv |
| O ₂ | < | 2 | 0,5 | 0,5 | 0,3 | ppmv |
| THC (as CH ₄) | < | 0,1 | 0,1 | 0,1 | 0,1 | ppmv |
| CO + CO ₂ | < | - | 0,5 | 0,1 | 0,3 | ppmv |
| H ₂ | < | - | 0,5 | - | 0,1 | ppmv |
| hal. HC | < | - | - | 1 | - | ppbv |
| Cylinders / Contents | | | | | | |
| F 5 200 bar * | | 1,0 | - | - | - | m ³ |
| F 10 200 bar | | 1,9 | 1,9 | - | 1,9 | m ³ |
| F 20 200 bar * | | 3,8 | - | - | - | m ³ |
| F 20 300 bar * | | 5,2 | - | - | - | m ³ |
| F 50 200 bar | | 9,6 | 9,6 | 9,6 | 9,6 | m ³ |
| F 50 300 bar | | 13,1 | - | - | - | m ³ |
| B 12* F 50 200 bar | | 114,7 | - | - | - | m ³ |
| B 12* F 50 300 bar | | 157,0 | - | - | - | m ³ |

Remarks

Applications:
Carrier gas in gas chromatography
Zero gas for analytical applications, especially in automotive industries
Component of gas mixtures for CO₂-lasers
Inert gas in chemical and pharmaceutical industries

* Not available in each country