

Marking

CAS-Number 7440-63-3

Characterization acc. ADR UN 2036, Xenon, compressed, 2.2 Class 2, 1 A

Cylinder Marking

shoulder:
light green

Essential properties

Colourless, odorless rare gas, compressed, heavier than air

Symbols of Risks

gas, compressed

Physical Properties

molecular weight: 131,30 kg/kmol
 gas density at 0°C and 1,013 bar: 5,8982 kg/m³
 density ratio to air: 4,5619

For additional safety information see Material-/safety data sheet No. *-XE-127

Valves / Manifolds

Valve connection acc. to national standards

Recommended Manifolds Spectrolab FM 51 / FM 52exact
Spectrocem FE 51 / FE 52exact

**Specifications / Forms of delivery**

| | | 4.8 | |
|-----------------------------|---|---------|--------|
| Composition | | | |
| Xe | > | 99,998 | Vol.-% |
| Impurities | | | |
| O ₂ | < | 0,5 | ppmv |
| N ₂ | < | 5 | ppmv |
| H ₂ O | < | 1 | ppmv |
| HC | < | 0,1 | ppmv |
| Ar | < | 5 | ppmv |
| Kr | < | 8 | ppmv |
| CF ₄ | < | 1 | ppmv |
| SF ₆ | < | - | ppmv |
| Cylinders / Contents | | | |
| F 2 | | 200,0 | l |
| F 10 | | 2000,0 | l |
| F 50 | | 10000,0 | l |

Remarks

Applications:
 Filling gas for lamps (halogen lamps, gas discharge lamps)
 Component of panning gas for plasma display panels (PDP)
 Component of excimer laser gas mixtures
 Anaesthetic gas in medicine

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Description

Colourless, odorless, under normal conditions inert rare gas, narcotic. Chemical compounds with Fluorine and Oxygen are known.

Materials

Cylinders and Valves: any usual materials
Seals: PTFE, PCTFE, PVDF, PA, PP, IIR, NBR, CR, FKM, Q, EPDM

Physical Properties

| | | | |
|-------------------------|--------------------|--|---|
| molecular weight | 131,30 kg/kmol | vapour pressure at 20°C | |
| Critical Point | | gas density at 0°C and 1,013 bar | 5,8982 kg/m ³ |
| temperature | 289,740 K | density ratio to air | 4,5619 |
| Pressure | 58,400 bar | gas density at 15°C and 1 bar | 5,514 kg/m ³ |
| density | 1,110 kg/l | Conversion Factor | |
| Triple Point | | liquid at Ts to m ³ gas (15°C, 1 bar) | |
| temperature | 161,396 K | Virial Coefficient | |
| Pressure | 0,81668 bar | Bn at 0°C | -6,8*10 ⁻³ bar ⁻¹ |
| Boiling Point | | B30 at 30°C | -5,8*10 ⁻³ bar ⁻¹ |
| temperature | 165,066 K; -108 °C | Gaseous State at 25°C and 1 bar | |
| liquid density | 2,94 kg/l | specific heat capacity cp | 0,1583 kJ/kg K |
| evaporation heat | 95,422 kJ/kg | thermal conductivity | 55,5*10 ⁻⁴ W/m K |
| | | dynam. viscosity | 23,0*10 ⁻⁶ Ns/m ² |