

Marking

CAS-Number 10024-97-2

Characterization acc. ADR UN 1070, Nitrous oxide, 2.2 (5.1)
Class 2, 2 O

Cylinder Marking



Essential properties

Colourless, odorless, oxidizing, narcotic gas, liquified, heavier than air

Symbols of Risks



oxidizing



gas, liquified

Physical Properties

molecular weight: 44,013 kg/kmol
 gas density at 0°C and 1,013 bar: 1,9781 kg/m³
 density ratio to air: 1,5299
 vapour pressure at 20°C: 50,599 bar

For additional safety information see Material-/safety data sheet No. *-N2O-093A

Valves / Manifolds

Valve connection acc. to national standards

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



Specifications / Cylinders

		2.0	UHP	
Composition				
N ₂ O	>	99,0	99,999	Vol.-%
Impurities				
CO ₂	<	-	1	ppmv
CO	<	-	1	ppmv
O ₂ / N ₂ / Ar	<	-	-	ppmv
H ₂ O	<	-	1	ppmv
CH ₄	<	-	0,1	ppmv
O ₂ + Ar	<	-	1	ppmv
N ₂	<	-	5	ppmv
NO	<	-	1	ppmv
NO ₂	<	-	1	ppmv
NH ₃	<	-	5	ppmv
Cylinders / Contents				
F 10		8,0	7,0	kg
F 50		37,5	37,5	kg

Remarks

Applications:
 oxidizing agent in atomic absorption spectrometry (AAS)
 oxidizer in rocket propellants
 anaesthesia in medical fields
 propellant for whipped cream (food industries)

UHP: oxidizing and etching gas in semiconductor industries