

Marking**CAS****Characterization acc. ADR****Cylinder Marking**

10102-43-9
UN 1660 NITRIC OXIDE,
COMPRESSED, 2.3(5.1)(8),(D)



Shoulder color: yellow

Essential properties

compressed gas, odorless, oxidizing, corrosive, toxic

Symbols of risks

For additional safety information see safety data sheet *-NO-088

Description

Colourless, toxic, oxidizing, in presence of moisture corrosive, odorless gas. Reacts with oxygen from air very easy to auburn corrosive nitrogen dioxide. Acc. to ISO 10298: LC50/1h = 115 ppm.

Materials

Cylinders and valves: any usual materials except brass or copper(-alloys).
With valves made of brass or copper(-alloys) danger of stress corrosion cracking by humidity.
Seals: PTFE, PCTFE, PVDF

Physical Properties			
molecular weight	30,0061 kg/kmol	vapour pressure at 20°C	
critical point		gas density at 0°C and 1,013 bar	1,3402 kg/m ³
temperature	180 K	density ratio to air	1,0366
Pressure	64,848 bar	gas density at 15°C and 1 bar	1,254 kg/m ³
density	0,52 kg/l	conversion factor	
triple point		liquid at Ts to m ³ gas (15°C, 1 bar)	
temperature	109,55 K	virial coefficient	
Pressure	0,21915 bar	Bn at 0°C	-1,12*10 ⁻³ bar ⁻¹
boiling point		B30 at 30°C	-0,75*10 ⁻³ bar ⁻¹
temperature	121,40 K; -152 °C	gaseous state at 25°C and 1 bar	
liquid density	1,188 kg/l	specific heat capacity cp	0,9941 kJ/kg K
evaporation heat	461 kJ/kg	thermal conductivity	257*10 ⁻⁴ W/m K
		dynam. viscosity	19,27*10 ⁻⁶ Ns/m ²