

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

7440-59-7
UN 1046 HELIUM,
COMPRESSED, 2.2,(E)



Shoulder color: brown

Essential properties

compressed gas, lighter than air, colorless, odorless

Symbols of risks

For additional safety information see safety data sheet *-HE-061A

Description

Colourless, odorless rare gas. Very much lighter than air. In closed rooms the breathing air is displaced (danger of asphyxiation). The inhalation of the gas effects a rise in the frequency of voice (Mickey-Mouse-effect).

Materials

Cylinders and Valves: any usual materials

Seals: PCTFE, PVDF, PA, PP, IIR, NBR, CR, FKM, EPDM

Physical Properties			
molecular weight	4,0026 kg/kmol	vapour pressure at 20°C	
critical point		gas density at 0°C and 1,013 bar	0,1785 kg/m ³
temperature	5,2014 K	density ratio to air	0,1380
Pressure	2,2746 bar	gas density at 15°C and 1 bar	0,1673 kg/m ³
density	0,06964 kg/l	conversion factor	
triple point		liquid at Ts to m ³ gas (15°C, 1 bar)	
temperature	2,177 K	virial coefficient	
Pressure	0,05035 bar	Bn at 0°C	0,53*10 ⁻³ bar ⁻¹
boiling point		B30 at 30°C	0,47*10 ⁻³ bar ⁻¹
temperature	4,224 K, -269 °C	gaseous state at 25°C and 1 bar	
liquid density	0,1250 kg/l	specific heat capacity cp	5,19412 kJ/kg K
evaporation heat	20,413 kJ/kg	thermal conductivity	1500*10 ⁻⁴ W/m K
		dynam. viscosity	19,68*10 ⁻⁶ Ns/m ²