DATA SHEET

HYDROGEN 5.0

PROPERTIES PHYSICAL & CHEMICAL





Molar mass: 2.016 g/mol Melting point: -259°C Boiling point: -252.8°C

Density of the gas phase (1.013 bar and

15°C): 0.0852 kg/ma

Density of the liquid phase (1.013 bar at

boiling point): 0.07076 kg/l

Gas density (1.013 bar at boiling point):

1.312 kg/ma

Latent heat of fusion (1.013 bar at triple

point): 58.158 kJ/kg

Latent heat of vaporization (at 1.013 bar

boiling point): 454.3 kJ/kg Critical temperature: -240°C Critical pressure: 12.98 bar

Compressibility factor (Z) (1.013 bar

and 15°C): 1.001

Concentration in the air: 0.00005% vol.

APPLICATIONS:

as a carrier gas in gas chromatography in the production of specialty metals and semiconductors for combustion in flame ionization detection instruments as a component in calibration gas mixtures

Air quality monitoring, analytical chemistry, calibration gas mixtures, chemical synthesis, electronics and semiconductors, emissions control, environmental monitoring, flame ionization, flame photometry, fuel cells, Gas Chromatography (GC), Petrochemical and Refining, pH Control, Pharmaceutical, Power Generation and Transmission, Process Control Instrument Calibration, Control Instrument Calibration.

TECHNICAL INFORMATION

Purity:	Impurities :			
H2	N2	H2O	02	CnHm
≥ 99.999 %	≤ 4 ppm	≤ 4 ppm	≤ 2 ppm	≤ 0.5 ppm

Conditioning:

Bottle B50

