

## **HYDROGEN 6.0**

# 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:**

High purity hydrogen is used for various analytical applications, such as GC in combination with various detectors such as FID, TCD, ECD; GC-MS; FPD, NPD and more. These analytical techniques are used in air quality monitoring, process control, product development and quality assurance.

Various industrial processes also use high purity hydrogen, such as fuel cell technology, machining of special metal alloys and quartz, reducing agent, leak testing medium, semiconductor applications. -conductors and photovoltaic systems.

#### **TECHNICAL INFORMATION**

Purity:	Impurities :				
H2	N2	H2O	O2	CO+CO2	CnHm
≥ 99.9999%	≤3 ppm	≤2 ppm	≤1 ppm	≤ 0.2 ppm	≤ 0 <b>.</b> 1 ppm

### **Conditioning:**

Bottle B50

