Oxygen

O_2

Guaranteed commercial specifications

Standard Specifications	*Values*
Purity	99,9% weight
Hydraulic pressure (PH)	Negative
Working pressure (PW)	≤ 1 ppm weight
International Standard cylinder and valve	EN 11118
Valve thread	M12x1
Compliance with European Directive	T-PED (Directive 2010/35/UE)

Main applications

In normal conditions oxygen is a colourless, odourless and insipid gas; it condensates in a light blue liquid. Oxygen is part of a small group of gasses literally paramagnetic. It is vital in industrial, medical and engineering settings. It is needed in home oxygen therapy, aerospace and metallurgy applications. In the industry sector, Oxygen is used with fuel gases in gas welding, gas cutting, oxygen scarfing, flame cleaning, flame hardening, and flame straightening. In gas cutting, the oxygen must be of high quality to ensure a high cutting speed and a clean cut.

Precautions of use

Refer to the Safety Data Sheet*.

Regulation

REACH Regulation n. 1907/2006: Oxygen is included in the exemptions from the obligation to register in accordance with Article 2, paragraph 7, letter a

**The Safety Data Sheet (MSDS) could be requested, after P.O., at laboratorio@mariel.it*

Oxygen PHYSICAL PROPERTIES

Atomic mass	g/mol $^{-1}$	15.999 g.mol^{-1}
Atomic number		8
Molecular mass	g/mol	32
Electronegativity according to Pauling		3.5
Density at 20 °C	Kg/m^3	1.429
Melting point	°C	- 219 °C @ hPa
Boiling point	°C	- 183 °C @ hPa
Critical temperature	°C	- 118 °C
Solubility (in the water)	mg/l	39
Vanderwaals radius	nm	0.074
Ionic radius		0.14 nm (-2)
Isotopes		4
Ozone Depleting Potential	(R-11 = 1)	0
GWP	(CO_2 = 1)	0

Direzione, uffici e magazzino/*Offices and management*: Via Olubi, 5 - 28013 GATTICO (NO) ITALY | Tel. +39 0322 838319 Fax. +39 0322 838813
Sede legale/*Headquarters*: Corso XX Settembre, 44 - 21052 BUSTO ARSIZIO (VA)