Air Synthetic instrument

**5.0** 

## PROPERTIES PHYSICAL & CHEMICAL





Molar mass:

N2: 28.0134 g/mol, O2: 31.9988 g/mol Melting point: N2: -210°C, O2: -219°C Boiling point: N2: -195.9°C, O2: -183°C

Density of the gas phase (1.013 bar and

15°C):

N2: 1.185 kg/ma, O2: 1.354 kg/ma

Density of the liquid phase (1.013 bar at

boiling point):

N2: 0.8082 kg/ma, O2: 1.1415 kg/l

Gas density (1.013 bar at boiling point):

N2: 4.614 kg/m, O2: 4.475 kg/m

Latent heat of fusion (1.013 bar at triple point):

N2: 25.73 kJ/kg, O2: 13.9 kJ/kg

Latent heat of vaporization (at 1.013 bar

boiling point):

N2: 198.38 kJ/kg, O2: 212.98kJ/kg

## **APPLICATIONS:**

The main applications or activities requiring high purity Synthetic Air are:

Air quality analysis, analytical chemistry,

Atomic Adsorption Spectrometry (AAS),

calibration gas mixtures, combustion oxida-

tion, emissions monitoring, environmental

monitoring,

Flame Ionization Detection (DIF), flame photometry,

Gas Chromatography (GPC), calibration of control instruments, zero adjustment for analyzers.

## **TECHNICAL INFORMATION**

Purity % by volume:		Impurity:			
N <sub>2</sub>	O <sub>2</sub>	CnHm	CO	CO <sub>2</sub>	H2O
Qs	20% +/-5	≤ 0.1 ppm	≤1 ppm	≤1 ppm	≤3 ppm

## **Conditioning:**

Air B50

