

# 1,3 BUTADIENE (C<sub>4</sub>H<sub>6</sub>)

Synonyms : trans-Butadiene; Biethylene; Bivinyli; Buta-1,3-diene;  
Butadiene 1-3, Erythrene, Vinylethylene



## Gas Description

1,3 Butadiene is a colourless, flammable, non-corrosive gas with an aromatic odour and a density at STP 2.36 kg/m<sup>3</sup>.

### Typical applications :

Manufacture of synthetic rubber  
Raw material for resins and latex paints  
Solvent Intermediate in organic synthesis

### Transport Regulations :

UN Number : 1010  
Shipping Name : BUTADIENES, STABILIZED  
Class : 2.1: Flammable gases  
CAS Number : 106-99-0  
Hazchem : 2WE

[Click here](#) for MSDS  
[Click here](#) for more information

## Physical Properties

Chemical symbol : C<sub>4</sub>H<sub>6</sub>  
Molecular weight : 54.092  
Specific gravity (Air=1) : 1.9153  
Specific volume (m<sup>3</sup>/kg) : 0.43  
Critical temperature : 152°C  
Boiling point : -4.5°C

Melting Point : 108.9°C  
Critical pressure (bar) : 42.7  
Major hazards : Fire and Reactivity  
Toxicity : TWA 10ppm STEL  
Flammability Range : 1.4 - 16.6% ref N°27  
Odour : Mild Aromatic

[Click here](#) for more information

## Application

### INDUSTRY

Oil and Gas

Chemicals

### APPLICATION

1,3-Butadiene is used in mixtures to calibrate analyzers for petrochemical analysis.

Used as feedback in the manufacturing of synthetic elastomers, predominantly styrene-butadiene rubber (SSBR) and polybutadiene.

[Click here](#) for more information

## 1,3 Butadiene : CP

Standard Purity 99.0% wt% (Liquid phase)

Gas		Cylinder information			
Typical impurities (ppm molar)		Cylinder Size	Valve Connection	Pressure (kPa)	Contents (m <sup>3</sup> )
cis-2 Butene	0.3%	15	CGA 510	140	17.0
Butadiene Dimer	0.1%	6			7.0
trans-2 Butene	0.1%	2			2.0

### Recommended Equipment

Single stage chrome plated brass body regulator with a stainless steel diaphragm.

For further information [Contact](#) the specialty gases representative in your region.