

TETRAFLUOROMETHANE (CF₄)

Synonyms : Carbon fluoride; Freon 14; Perfluoromethane;
Carbon tetrafluoride; Halocarbon 14; R 14; PFC 14



AIR LIQUIDE

Gas Description

Tetrafluoromethane is a colourless, non-flammable non-corrosive and non-toxic gas with a slight ethereal odour and is narcotic in high concentration. It has a gas density at STP 3.72 kg/m³.

Typical applications :

Low temperature refrigerant
Gas insulator
Plasma etching
Neutral, inert gas
Synthesis of polymers and copolymers

Transport Regulations :

UN Number : 1982
Shipping Name : TETRAFLUOROMETHANE,
COMPRESSED
Class : 2.2: Non-flammable, non-toxic gases
CAS Number : 75-73-0
Hazchem : 2[T]E

[Click here](#) for MSDS

[Click here](#) for more information

Physical Properties

Chemical symbol : CF₄
Molecular weight : 88.01
Specific gravity (Air=1) : 3.038
Specific volume (m³/kg) : 0.275
Critical temperature : -45.5°C
Boiling point : -128°C

Melting Point : -184°C
Critical pressure (bar) : 37.43
Major hazards : High Pressure / Suffocation
Toxicity : None Established
Flammability Range : Non-flammable
Odour : Slight ethereal

[Click here](#) for more information

Application

INDUSTRY

Electronics

APPLICATION

In semiconductor manufacturing, CF₄ in mixture with oxygen is used for plasma cleaning of CVD reactors. Halocarbon 14 is a selective etching agent for many metals, metal silicides and oxides.

[Click here](#) for more information

Tetrafluoromethane

Gas

Typical impurities
(ppm molar)

Cylinder information

Cylinder Size

Valve Connection

Pressure (kPa)

Contents (m³)

Available Upon Request
Call For Supply Information

Recommended Equipment

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