

Technical Data Sheet

1-Propyne (Syn: Methyl Acetylene)

CAS # 74-99-7

Product # 8364.99

DESCRIPTION: 1-Propyne is a colorless, non-toxic flammable gas at room temperature and atmospheric pressure. It is shipped as a liquified gas under its own vapor pressure of 75 psia.

USES: Specialty gas mixtures, Organic synthesis and Instrument calibration

TYPICAL PHYSICAL & CHEMICAL PROPERTIES:

Purity Specification: 99% Min.

Refractive Index @ -40°C: 1.3863

Density, Liquid @ Saturation Pressure @ -23.2°C. 0.6711 kg/l₁

Vapor Pressure @ 20°C 75.0 psia₂

Boiling Point @ 1 ATM: -23.23° C₂

Melting Point @ 1 ATM: -102.7° C₂

Viscosity, Gas @1 ATM: 0.00833 CP₁

Odor: Characteristic Acetylenic odor.

TYPICAL IMPURITIES:

Other C-3 and C-4 Hydrocarbons

* Standard product is uninhibited. Inhibitors can be added per customer request. BHT and Hydroquinone are standard inhibitors

TOXICITY: 1-Propyne is not considered a toxic gas, however its toxicological properties have not been fully investigated. It has some anesthetic properties, and probably acts as a simple asphyxiant. Due to its low atmospheric boiling point material is cryogenic hazard.

SHIPPING CLASS: UN3161 Liquified Gas, Flammable, (N.O.S.)

| Cylinder Size | Volume (Kg) | CGA with diptube (liquid withdraw) | CGA without diptube (vapor withdraw) |
|----------------|-------------|---------------------------------------|---|
| Lecture Bottle | .250 | n/a | CGA 180 |
| 5 lb | up to 2.2 | CGA 510 | CGA 555 |
| 11 lb | up to 5.0 | CGA 510 | CGA 555 |
| 20 lb | up to 9.0 | CGA 510 | CGA 555 |
| 60 lb | up to 27.0 | CGA 510 | CGA 555 |
| 100 lb | up to 45.0 | CGA 510 | CGA 555 |