

Full Spectrum Product Line

Whether for lab analysis or process control, Praxair offers a wide range of pure organics and mixtures in many container types and sizes. Our ISO 9002 Certified Advanced Application Group in Geismar, Louisiana, for example, specializes in unusual organic matrices and trace impurities.

Praxair's high-quality manufacturing process features:

- Computerized phase behavior evaluation
- High-purity assayed raw materials
- Proprietary cylinder preparation
- Precise gravimetric blending systems
- Certification and/or confirmation analysis



Typical Liquid Mixtures –

ASTM D-3710

Compounds	Conc (LV%)
Propane	1.0
Isobutane	3.0
n-Butane	10.0
Isopentane	9.0
n-Pentane	7.0
2-Methylpentane	5.0
n-Hexane	5.0
2,4-Dimethylpentane	5.0
n-Heptane	9.0
Toluene	10.0
n-Octane	5.0
p-Xylene	12.0
n-Propylbenzene	3.0
n-Decane	3.0
n-Butylbenzene	3.0
n-Dodecane	3.0
n-Tridecane	2.0
n-Tetradecane	2.0
n-Pentadecane	2.0

Typical Refinery Gas Standard

Compounds	Concentration
Hydrogen	38.5%
Methane	15.0%
Propane	8.0%
Ethylene	7.5%
Ethane	7.0%
Nitrogen	4.0%,
Carbon Dioxide	3.0%
Propylene	3.0%
Propylene	3.0%
n-Butane	2.5%
Isobutane	2.0%
Carbon Monoxide	2.0%
1-Butene	1.0%
Isobutylene	1.0%
trans-2-Butene	1.0%
cis-2-Butene	1.0%
Acetylene	1.0%
n-Pentane	0.5%
Isopentane	0.5%
Argon	1.0%
1-Pentene	0.1%
trans-2-Pentene	0.1%
cis-2-Pentene	0.1%
2-methyl 2-Pentene	0.1%
n-Hexane	0.1%

Trace Impurity Mixtures

Fuel Standards

MTBE	100 ppm
Isooctane	Balance
Dibutyl Disulfide	1 ppm
Isooctane	Balance

Industrial Hygiene

Hydrogen Sulfide	25 ppm
Carbon Monoxide	50 ppm
Methane	2.5%
Oxygen	19%
Nitrogen	Balance

Refer to E11-12 for more information

Environmental

Carbon Dioxide	10%
Carbon Monoxide	50 ppm
Nitric Oxide	100 ppm
Sulfur Dioxide	250 ppm
Nitrogen	Balance

Refer to E6-10 for more information

Total Sulfur Standards

Reduced sulfur blends in inert matrix. NIST traceable to H2S SRM.

Compounds	Minimum Conc.
Carbon Disulfide	1.0 ppm
Carbonyl Sulfide	95 ppb
Dimethyl Disulfide*	0.5 ppm
Dimethyl Sulfide	0.5 ppm
Ethyl Mercaptan	1.0 ppm
Methyl Mercaptan	1.0 ppm
Propyl Mercaptan	2.0 ppm

* Dimethyl Disulfide must be blended separately due to instability and reactivity with other components.