

Pure Gases

With over 50 Pure Gases in more than 170 grades, whether in liquid, cryogenic, or compressed gas form, Specialty Gases cover a wide range of products and applications. Whether you need sulfur hexafluoride (SF₆) for electric transmission power insulation, hydrogen sulfide (H₂S) for sour gas testing, hydrogen chloride (HCl) for cotton seed delinting, or hydrocarbon mixtures for stove testing, Praxair can supply you with any of your Specialty Gases product needs.

Readily Available Gas List*

Acetylene	Deuterium	134A	Nitrogen
Air	Diborane	218	Nitrogen Dioxide
Ammonia	Dichlorosilane	C318	Nitrogen Trifluoride
Argon	Dimethyl Ether	Helium	Nitrous Oxide
Arsine	Disilane	Hydrogen	Oxygen
Boron Trichloride	Ethane	Hydrogen Bromide	Phosphine
Boron Trifluoride	Ethylene	Hydrogen Chloride	Propane
1,3 Butadiene	Ethylene Oxide	Hydrogen Sulfide	Propylene
n-Butane	Germane	Isobutane	Silane
1-Butene	Halocarbon	Isobutylene	Silicon Tetrachloride
cis-2-Butene	14	Krypton	Sulfur Dioxide
trans-2-Butene	22	Methane	Sulfur Hexafluoride
Carbon Dioxide	23	Methyl Chloride	Trichlorosilane
Carbon Monoxide	41	Neon	Tungsten Hexafluoride
Chlorine	116	Nitric Oxide	Xenon

*More gases available upon request.

Nomenclature and Purity

Actual nomenclature will vary with difference in trade and grade names. One of the most important factors is the gas purity. While some products are defined by specific monikers such as UHP (Ultra High Purity) or Research grades, actual purity level can be represented in two ways and usually represents the minimum purity level in the product:

- As a quality code, e.g. 4.5 – where the number before the dot represents the number of nines and the last number indicates the last decimal:

4.5 = 99.995%

5.7 = 99.9997%

6.0 = 99.9999%

- As purity in percent, e.g. > 99.9995%

This typically represents the minimum concentration of the actual gas. In the case of liquefied gases the purity always represents concentration in the liquid phase.

As, or sometimes even more, important than the purity grade are the impurities in the gas. Impurities usually result from the gas manufacturing process and, as such, vary by gas and gas products. In the product specifications, the maximum concentrations of the different known impurities are listed in percentage, parts per million (ppm), or parts per billion (ppb) either in function of relative moles, weight, or volume.