

GAS PRODUCTS FOR SPECIAL APPLICATIONS

EPA PROTOCOL STANDARDS

Hong Kong Specialty Gases provides U.S. Environmental Protection Agency (EPA) Protocol Gas Standards for compliance with Parts 50, 58, 60 and 75 of 40CFR, Code of Federal Regulations. The regulations specify that gaseous pollutant concentration standards used for calibration and audit of continuous emission monitors (CEM) and ambient air quality analyzers are analyzed according to EPA TRACEABILITY PROTOCOL FOR ASSAY AND CERTIFICATION OF GASEOUS CALIBRATION STANDARDS (EPA-600/R-97/121) revised September 1997. Our Protocol Gas Standards are manufactured, analyzed, and certified to meet or exceed all of the requirements of EPA-600/R-97/121.

The following components, either singularly or in multi-component blend, with the concentration ranges are covered by EPA-600/R-97/121 and are available from Hong Kong Specialty Gases as US EPA Protocol Gas Standards.

Component	Balance	Available Concentrations
CO ₂	Air	2000 ppm to 20%
CO ₂	N ₂	2000 ppm to 20%
CO	Air	0.5 ppm to 6.25% ¹
CO	N ₂	0.5 ppm to 6.25%
H ₂ S	Air	25ppm to 200 ppm
H ₂ S	N ₂	5 ppm to 200 ppm
CH ₄	Air	1 ppm to 1000 ppm
CH ₄	N ₂	1 ppm to 1000 ppm
NO	N ₂	0.5 ppm to 1%
NO ₂	Air / N ₂	25 ppm to 3250 ppm ²
O ₂	N ₂	1% to 23%
C ₃ H ₈	Air	1 ppm to 2% ¹
C ₃ H ₈	N ₂	1 ppm to 2%
SO ₂	Air	5 ppm to 4550 ppm
SO ₂	N ₂	0.5 ppm to 1%

1. Flammable Gas/Oxidizer restricted at elevated concentration
 2. Vapor pressure restricted at concentration above 1650 ppm

Typical applications of EPA Protocol Standards:

- Environmental Auditing
- Linearity Checks
- Stack monitor calibration
- Cylinder Gas Auditing
- Ambient monitor calibration
- Scrubber efficiency verification
- Certification of CEM Systems
- Relative accuracy test audits