

Praxair's Gas Grade Recommendations

Analytical Method/ Detector	Page Number	Carrier and Support Gases	Analytical Range Sensitivity		Type of Analysis Impurity Considerations
			< 100 ppm	>100 ppm	
Optical Spectrometry					
Emission					
Atomic Emission					
- ICP (Inductive Coupled Plasma)	C6/7	Ar	AR 4.8IC	AR 4.8IC	Elemental Analysis
	C63	LAr	AR 4.8IC LC	AR 4.8IC LC	
	C44/45	N ₂	NI 5.0UH	NI 5.0 UH	
	C32/33	H ₂	HY 5.0UH	HY 5.0 UH	
Arc or Spark Emission					
	C6/7	Ar	AR 5.0UH	AR 4.8	Elemental Analysis
	C32/33	H ₂	HY 5.0UH	HY 4.5Z	
	E5	5% Ar in H ₂	IG NC6	IG NC6	
Chemiluminescence					
	C2/3	Air	AI 0.0CE	AI 0.0CE	NO-NO₂-NOX Hydrides and O₃
	C44/45	N ₂	NI 5.5CE	NI 5.5CE	
	C50/51	O ₂	OX 4.3UH	OX 4.3UH	
Fluorescence UV					
	C2/3	Air	AI 0.0VC	AI 0.0VC	SO₂-H₂S-Organic Compounds
	C44/45	N ₂	NI 5.5CE	NI 5.5CE	
XRF (Fluorescence X)					
	E5	10% CH ₄ in Ar	IG P10C	IG P10C	Elemental Analysis
	E5	1.3% n-C ₄ H ₁₀ in He	IG NC4	IG NC4	
	E5	0.95% i-C ₄ H ₁₀ in He	IG NC5	IG NC5	
	C66	LN ₂	N1 4.8LC	N1 4.8LC	
Mass Spectrometry					
MS (Under Vacuum)					
	C6/7	Ar	AR 5.0UH	AR 5.0UH	All Compounds
	C44/45	N ₂	NI 5.5TG	NI 5.5TG	
	C30/31	He	HE 5.5TG	HE 5.5TG	

Legend

- UH – Ultra High Purity
- RS – Research
- IC – Inductive Coupled Plasma
- CE – Continuous Emissions Monitoring
(See Pure Gas Section for correct definition)
- TG – Trace Analytical
- Z – Zero
- VC – Volatile Organic Compound Free
- HC – Hydrocarbon Free

Please refer to designated page numbers for available cylinder styles, contents, and other information.

Refer to the Instrumentation Mixture Summary on Page E5 for additional information regarding mixtures.