

Gas Mixtures for Integrated Circuit Laser Annealing

HCl, Hydrogen, Neon, and Xenon

Praxair has combined its leading edge precision mixture manufacturing technology with its captive rare gas production to offer a secure and cost competitive supply of excimer laser gas mixtures.

Praxair's excimer laser products are available to support annealing for integrated circuit processing at the 308 nm wavelength. These gas mixtures have been OEM and customer tested in high volume manufacturing operations.

Key Benefits

- OEM and customer tested
- Secure raw material supply
- Local production and warehousing
- High precision analytical and production control



HCl/NEON (308)		Spec
Major Components	HCl	0.50%
	Ne	Balance
Impurities (ppm)	CO	< 1
	Fe	< 1
	H ₂ O	< 2
	N ₂	< 15
	O ₂	< 2

10% Xe in Neon		Spec
Major Components	Xe	0.50%
	Ne	Balance
Impurities (ppm)	Ar	<5
	CF ₄	<0.1
	H ₂ O	<1
	Kr	<8
	N ₂	<5
	O ₂	<0.5
	THC	<0.1

0.5% H ₂ in Neon		Spec
Major Components	HCl	0.50%
	Ne	Balance
Impurities (ppm)	CO+CO ₂	< 015
	H ₂ O	< 5
	N ₂	< 5
	O ₂	< 1
	THC	< 0.1

Neon 99.999%		Spec
Impurities (ppm)	CH ₄	<0.5
	CO	<0.5
	CO ₂	<0.5
	H ₂ O	<0.5
	He	<8
	N ₂	<1
	O ₂	<0.5

Cylinder	Per customer specifications
Valve	CGA or DISS
Contents	Per customer specifications
Pressure	Per customer specifications

About Praxair

Praxair is dedicated to helping electronics manufacturers lower costs, improve productivity, enhance technology and reduce environmental impact by serving as a single, integrated source for a variety of process gases, materials and related equipment and services.