

Excimer Laser Pure Mixtures

Excimer laser cavities are charged with an optional mixture of a halogen donor, typically fluorine or hydrogen chloride, a rare gas buffer and an inert gas diluent, usually helium. Sometimes a small amount of hydrogen is added as a lifetime extension additive.

The use of Matheson Tri-Gas pure gas components with halogen mixtures permits the optimal charging of the laser cavity to provide stable pulsed laser output, enhanced shot to shot amplitude stability, increased gas fill time and reduced system contamination.

Argon

Major Component	Concentration	Cylinder Size*	Contents		Valve Outlet
			US	Metric	
In Helium Certified or Unanalyzed	1 - 25%	300 200	269 ft ³ 200 ft ³	7.07 m ³ 5.26 m ³	CGA 580
In Neon Certified or Unanalyzed	1 - 25%	300 200	265 ft ³ 199 ft ³	6.97 m ³ 5.23 m ³	CGA 580

Shipping Information:

DOT Name: Rare Gases Mixtures
 Hazard Class: 2.2
 ID No.: UN 1979
 DOT Label: Nonflammable Gas

*Other sizes available on request.

Hydrogen

Major Component	Concentration	Cylinder Size*	Contents		Valve Outlet
			US	Metric	
In Helium Certified or Unanalyzed	0.02 - 0.1%	300 200	269 ft ³ 200 ft ³	7.07 m ³ 5.26 m ³	CGA 350
In Neon Certified or Unanalyzed	0.02 - 0.1%	300 200	265 ft ³ 199 ft ³	6.97 m ³ 5.23 m ³	CGA 580

Shipping Information:

DOT Name: Compressed Gases, N.O.S.
 Hazard Class: 2.2
 ID No.: UN 1956
 DOT Label: Nonflammable Gas

*Other sizes available on request.

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Hydrogen Chloride

Major Component	Concentration	Cylinder Size*	Contents		Valve Outlet
			US	Metric	
In Helium	0.2 - 10%	300 200	269 ft ³	7.07 m ³	CGA 330
Certified or Unanalyzed			200 ft ³	5.26 m ³	
In Neon	0.2 - 10%	300 200	265 ft ³	6.97 m ³	CGA 330
Certified or Unanalyzed			199 ft ³	5.23 m ³	

Shipping Information:

(Must list two components in parentheses in association with the proper shipping name.)

DOT Name: Compressed Gases, N.O.S.

Hazard Class: 2.2

ID No.: UN 1956

DOT Label: Nonflammable Gas

*Other sizes available on request.

Xenon

Major Component	Concentration	Cylinder Size*	Contents		Valve Outlet
			US	Metric	
In Helium	1 - 10%	6 6	6 ft ³	0.16 m ³	CGA 580
Certified or Unanalyzed			6 ft ³	0.16 m ³	
In Neon	1 - 10%	6 6	6 ft ³	0.16 m ³	CGA 580
Certified or Unanalyzed			6 ft ³	0.16 m ³	

Shipping Information:

(Must list two components in parentheses in association with the proper shipping name.)

DOT Name: Rare Gases Mixtures

Hazard Class: 2.2

ID No.: UN 1979

DOT Label: Nonflammable Gas

*Other sizes available on request.