



# Lighting Gases

Air Liquide manufactures pure gases and SCOTT™ rare gas mixtures with guaranteed accuracy for many lighting applications. Components of these mixtures are dependent on your specific lighting application. Please see below for typical components and balance gases. Many concentration ranges are available in a variety of cylinder sizes. Contact your Air Liquide representative to discuss your application.

## Recommended Applications

- Incandescent
- Fluorescent
- High-Density Discharge (HID) Lamps
- Neon signs

## Pure Gases

Specifications									Recommended Equipment	
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			CF	m <sup>3</sup>	psig	bar	lbs.	kg		
Argon ALPHAGAZ 1 H <sub>2</sub> O < 3 ppm O <sub>2</sub> < 2 ppm THC < 0.5 ppm	99.999%	49*	336	10	2640	182	177	81	Two-Stage Regulator Q1-318B-580 Q1-14C-580 LB Regulator Q1-20B-580	270 275 294
		44*	255	7	2265	156	158	72		
		LB	2	0.1	1800	124	4	2		
Helium ALPHAGAZ 1 H <sub>2</sub> O < 3 ppm O <sub>2</sub> < 2 ppm THC < 0.5 ppm	99.999%**	49*	291	8	2640	182	146	67	Two-Stage Regulator Q1-318B-580	270
		44*	223	6	2265	156	135	61		
Krypton Research Plus Ar < 1 ppm CF <sub>4</sub> < 0.5 ppm CO + CO <sub>2</sub> < 1 ppm H <sub>2</sub> < 1 ppm H <sub>2</sub> O < 1 ppm N <sub>2</sub> < 2 ppm O <sub>2</sub> < 1 ppm THC < 0.5 ppm Xe < 5 ppm Total Impurities < 10 ppm	99.999%	49	360	10	1819	125	78	36	Two-Stage Regulator Q1-318B-580 Q1-14C-580 Single-Stage Regulator Q1-226-180†	270 275 299
		30AL	180	5	2050	141	39	18		
		16AL	36	1	940	64	8	4		
		7AL	18	0.5	1238	85	4	2		
		110	4	0.1	1800	124	0.9	0.4		
Neon Research Plus CH <sub>4</sub> < 0.5 ppm CO < 1 ppm CO <sub>2</sub> < 1 ppm H <sub>2</sub> < 1 ppm H <sub>2</sub> O < 1 ppm He < 8 ppm Kr < 2 ppm N <sub>2</sub> < 2 ppm O <sub>2</sub> < 1 ppm	99.999%	49	270	8	2000	138	14	6	Two-Stage Regulator Q1-318B-580 Q1-14C-580 Single-Stage Regulator Q1-226-180†	270 275 299
		44	180	5	2000	138	9	4		
		16AL	36	2	1200	83	2	0.9		
		7AL	18	0.8	1200	83	0.9	0.4		
		110	4	0.1	1800	124	0.2	0.1		

\* Cylinder packs are available. Please see the Pures section of this catalog for more information.

\*\* Excluding neon.

† For SCOTTY 110 cylinder.



# Lighting Gases continued

## Pure Gases

Specifications									Recommended Equipment	
Grade	Purity (Minimum)	Size	Contents		Pressure		Weight		Description Model Number	Page
			CF	m <sup>3</sup>	psig	bar	lbs.	kg		
Xenon Research Plus	99.999%	49	360	10	1020	70	123	56	Two-Stage Regulator Q1-318B-580	270
Ar < 1 ppm		30AL	180	5	852	59	61	28		
C <sub>2</sub> F <sub>6</sub> < 0.1 ppm		16AL	36	1	924	65	12	6	Single-Stage Regulator Q1-14C-580	275
CF <sub>4</sub> < 0.1 ppm		7AL	18	0.5	1240	86	6	3		
CO + CO <sub>2</sub> < 1 ppm		110	2	0.1	795	55	0.6	0.3	Q1-3300B-580 Q1-226-180*	270 299
H <sub>2</sub> < 1 ppm										
H <sub>2</sub> O < 1 ppm										
Kr < 5 ppm										
N <sub>2</sub> < 2 ppm										
O <sub>2</sub> < 1 ppm										
SF <sub>6</sub> < 0.1 ppm										
THC < 0.5 ppm										
Total Impurities < 10 ppm										

\* For SCOTTY™ 110 cylinder.

Please note: Subject to availability – contact your Air Liquide representative for more information.

## SCOTT Gas Mixtures

Balance Gas	Components
Argon	Methyl Bromide Methyl Iodide Neon Nitrogen Oxygen
Krypton	Methyl Bromide Methyl Iodide Methylene Bromide Nitrogen Phosphine
Neon	Argon Helium Krypton
Xenon	Methyl Bromide Methylene Bromide Nitrogen Phosphine