

## Praxair's LaserStar™ Gases For CO<sub>2</sub> Lasers

**LaserStar**  
By Praxair

### LaserStar 5.5

Resonator gas: less than 5 ppm possible contamination  
Minimum purity 99.9995%

- Offered in aluminum cylinders
- Concentration of each minor component within +/-2% accuracy
- Pure gas 10x cleaner than the minimum industry standard
- 60% less resonator maintenance

LaserStar 5.5	PURITY	MOISTURE	TOTAL HYDROCARBONS	TRACE OXYGEN	TOTAL HYDROCARBONS
HELIUM	99.9995%	< 0.5 ppm	< 0.1 ppm	< 1 ppm	< 50 ppm
NITROGEN	99.9995%	< 2 ppm	< 0.1 ppm	< 1 ppm	< 50 ppm
CARBON DIOXIDE	99.9995%	< 0.5 ppm	< 10 ppm	< 2 ppm	< 100 ppm

COMPONENT GASES	CYLINDER STYLE	CONTENT	PART NO.
LaserStar 5.5 Helium	AT	239ft <sup>3</sup>	HE 5.5LS-AT
LaserStar 5.5 Nitrogen	AT	250 ft <sup>3</sup>	NI 5.5LS-AT
LaserStar 5.5 CO <sub>2</sub>	AT	70 lbs.	CD 5.5LS-AT

#### PREMIXED GASES

CO <sub>2</sub>	N <sub>2</sub>	He	CO	CYLINDER STYLE	CONTENTS	PRESSURE (psig)	PART NO.
5.0%	55.0%	40.0%	-	AT	240 ft <sup>3</sup>	2,200	LS NICDHEPB2-AT
5.0%	35.0%	60.0%	-	AT	240 ft <sup>3</sup>	2,200	LS HECD5NIPB3-AT
5.0%	25.0%	70.0%	-	AT	240 ft <sup>3</sup>	2,200	LS HECD5NIPB4-AT
3.4%	15.6%	81.0%	-	AT	232 ft <sup>3</sup>	2,200	LS HECDNIPB14-AT
1.7%	23.4%	74.9%	-	AT	232 ft <sup>3</sup>	2,200	LS HECDNIPB6-AT
4.5%	13.5%	82.0%	-	AT	232 ft <sup>3</sup>	2,200	LS HECDNIPB1-AT
8.0%	60.0%	28.0%	4.0%	AT	247 ft <sup>3</sup>	2,200	LS NIX4PB1-AT
3.14%	31.4%	65.5%	-	AT	232 ft <sup>3</sup>	2,200	LS HECDNIPB 26-AT

### LaserStar 5.0

#### COMPONENTS AND PREMIXED GASES

Resonator gas: less than 10 ppm possible contamination

- Offered in steel cylinders
- Mixtures are prepared using component gases with minimum specifications as listed at right
- Pure gas 5x cleaner than the minimum industry standard
- 30% less resonator maintenance

LaserStar 5.0	PURITY	TRACE OXYGEN	MOISTURE	TOTAL HYDROCARBONS
HELIUM	99.999%	< 1 ppm	< 2 ppm	< 0.5 ppm
NITROGEN	99.999%	< 1 ppm	< 3 ppm	< 0.5 ppm
CARBON DIOXIDE	99.999%	< 5 ppm	< 3 ppm	< 1 ppm

COMPONENT GASES	CYLINDER STYLE	CONTENT	PART NO.
LaserStar 5.0 Helium	T	291 ft <sup>3</sup>	HE 5.0LS-T
LaserStar 5.0 Nitrogen	T	304 ft <sup>3</sup>	NI 5.0LS-T
LaserStar 5.0 CO <sub>2</sub>	T	50 lbs.	CD 5.0LS-T

#### PREMIXED GASES

CO <sub>2</sub>	N <sub>2</sub>	He	CO	CYLINDER STYLE	CONTENTS	PRESSURE (psig)	PART NO.
5.0%	55.0%	40.0%	-	T	291 ft <sup>3</sup>	2,640	LS NICDHECB2-T
5.0%	35.0%	60.0%	-	T	291 ft <sup>3</sup>	2,640	LS HECD5NICB3-T
3.4%	15.6%	81.0%	-	T	281 ft <sup>3</sup>	2,640	LS HECDNICB14-T
1.7%	23.4%	74.9%	-	T	278 ft <sup>3</sup>	2,640	LS HECDNICB6-T
4.5%	13.5%	82.0%	-	T	281 ft <sup>3</sup>	2,640	LS HECDNICB1-T
8.0%	60.0%	28.0%	4.0%	A	272 ft <sup>3</sup>	2,640	LS NIX4CB1-AT
3.14%	31.4%	65.5%	-	T	267 ft <sup>3</sup>	2,640	LS HECDNICB 26-T

Specifications subject to change without notice. Consult your Praxair representative when ordering.

#### Available OEM Gases

- Trumpf® diffusion-cooled laser 5-part mix. Order part No. LS HEX5C6ZA42
- Rofin® slab laser 6-part mix. Order part No. LS HECD6X1CA42