PRECISION GAS MIXTURES





GASCO Affiliates, LLC is a leading manufacturer of Precision Calibration Gas Mixtures. Specializing in non-refillable calibration gas mixtures, GASCO has the capability of providing a wide range of simple mixtures such as ultra high purity Nitrogen, as well as complex four gas mixtures and highly reactive gas mixtures.

We offer a wide variety of standard cylinder sizes as well as the highest quality regulators, carrying cases and accessories available. GASCO has over 25 years of gas detection experience. Not only can we provide high quality calibration gas, we can also provide the knowledge and expertise of how and why to use the calibration gas.

No other calibration gas manufacturer has this vast knowledge of portable gas monitors, indoor air quality monitors, fixed gas detection systems, continuous emission monitoring systems, infrared gas detection, process gas chromatographs, ion mobility spectrometers, flame ionization detectors, photo ionization detectors and other monitoring and detection technologies.

So when it comes to calibration gas for gas detection technologies, call the experts at GASCO.

- DEPENDABILITY -

- ▶ GASCO is always ready and flexible to meet any customer needs.
- ▶ GASCO has the best customer service in the industry to fulfill your requirements.
- ▶ GASCO maintains inventories for next day or same day shipments.

-QUALITY -

- ▶ GASCO has the facilities and expertise to blend gases to your exact specifications.
- ▶ Expert employees have both the knowledge and the know-how to recommend the proper gas mixture and delivery technique for your calibration requirements.
- ▶ GASCO consistently meets or exceeds customer requirements.

-VALUE -

- GASCO provides exceptional products and services at a very competitive price.
- ▶ There are no minimum quantity orders.

"The Highest Quality At Affordable Prices"

2. Company Prof<u>ile</u>

3. Reactive Gases

4. Regulators

5. Cylinders

6. Gas Mixtures

7. Accessories

HIGHLY REACTIVE GAS MIXTURES

GASCO's vast experience and technical knowledge enables us to offer the most difficult of reactive gas mixtures with confidence and our guarantee of quality and stability.



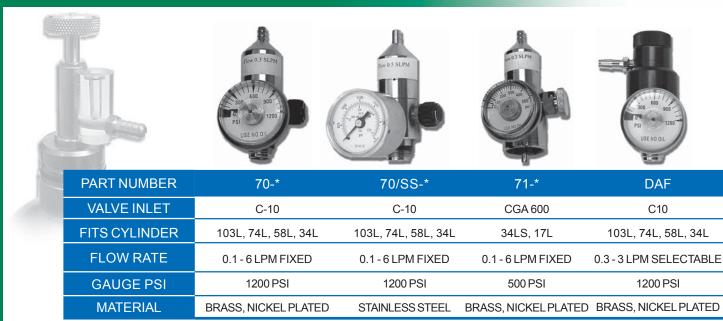
SPECIALIZATION

▼ REACTIVE GAS MIXTURES ▼

GAS	SYMBOL	BALANCE	RANGE	WARRANTY
AMMONIA	NH ₃	AIR or NITROGEN	10 - 500 ppm	12 MO.
CHLORINE	Cl ₂	NITROGEN	2 - 1000 ppm	8 MO.
ETHYLENE OXIDE	ETO	NITROGEN	5 - 100 ppm	12 MO.
HYDROGEN CYANIDE	HCN	NITROGEN	5 - 20 ppm	12 MO.
HYDROGEN CHLORIDE	HCI	NITROGEN	3 - 1000 ppm	8 MO.
HYDROGEN SULFIDE	H ₂ S	AIR or NITROGEN	5 ppm - 1% vol.	12 MO.
NITRIC OXIDE	NO	NITROGEN	5 - 900 ppm	6 MO.
NITROGEN DIOXIDE	NO ₂	AIR or NITROGEN	3 - 200 ppm	8 MO.
PHOSPHINE	PH ₃	NITROGEN	0.5 - 15 ppm	8 MO.
SILANE	SIH ₄	NITROGEN	5 - 10 ppm	12 MO.
SULFUR DIOXIDE	SO ₂	AIR or NITROGEN	2 - 100 ppm	12 MO.

Semiconductor Facilities • Pharmaceuticals
Wastewater Treatment Plants • Plating Processes
Combustion Efficiency • Sterilization
Refrigeration • Pulp & Paper

REGULATORS



^{*} Suffix delineates the desired flow rate



GASCO offers a wide selection of Regulators, our highest quality Stainless Steel Regulators These Regulators complement the









PART NUMBER	552L	221L	103L	74L	58L
PRESSURE	PRESSURE 2200 PSI		1000 PSI	500 PSI	500 PSI
GAS TYPE NON-REACTIVE N		NON-REACTIVE	NON-REACTIVE	ALL REACTIVE MIXTURES	ALL REACTIVE MIXTURES
DIMENSIONS	20.75" X 4.5"	9" X 16.25"	13.6" X 3.3"	14.25" X 4.25"	14.25" X 3.5"
WATER CAPACITY	3.69 LITERS	12 LITERS	1.52 LITERS	2.2 LITERS	1.72 LITERS
MATERIAL	STEEL	STEEL	STEEL	ALUMINUM ALLOY	ALUMINUM ALLOY
WEIGHT	11 LBS	6.3 LBS	48 OZ. (3 LBS)	2 LBS 5 OZ.	1 LB 12 OZ.
VALVE INLET	GAS SPECIFIC	CGA 165	5/8" - 18 UNF (C10)	5/8" - 18 UNF (C10)	5/8" - 18 UNF (C10)
REGULATOR	N/A	70-SERIES W/ ADAPTER	70-SERIES DIAL-A-FLOW 70-FMV	70-SERIES DIAL-A-FLOW 70-FMV 70-ss SERIES	70-SERIES DIAL-A-FLOW 70-FMV 70-SS SERIES
CONTENTS	552 LITERS (19.4 CU FT)	221 LITERS (8.0 CU FT)	103 LITERS (3.6 CU FT)	74 LITERS (2.6 CU FT)	58 LITERS (2.0 CU FT)

4 800-910-0051

CYLINDERS



ranging from our cost effective Control Valve to for Highly Reactive Gas Mixtures. large selection of Cylinders below.









34L	34LS	17L	10L	PART NUMBER
500 PSI	500 PSI	240 PSI	160 PSI	PRESSURE
ALL REACTIVE MIXTURES	NON-REACTIVE	NON-REACTIVE	MOST REACTIVE & ALL NON-REACTIVE	GAS TYPE
10.64" X 3.125"	10.75" X 2.9"	10.75" X 2.9"	9.4" X 2.9"	DIMENSIONS
0.9 LITERS	0.9 LITERS	1.0 LITERS	0.97 LITERS	WATER CAPACITY
ALUMINUM ALLOY	STEEL	STEEL	ALUMINUM ALLOY	MATERIAL
1 LB 14.9 OZ.	1 LB 8 OZ.	1 LB	5 OZ.	WEIGHT
5/8" - 18 UNF (C10)	CGA 600	CGA 600	N/A	VALVE INLET
70-SERIES DIAL-A-FLOW 70-FMV 70-SS SERIES	71-SERIES 72-MFV/17 CV-2	71-SERIES 72-MFV/17 CV-2	SHAVING CREAM OR TRIGGERAEROSOL	REGULATOR
34 LITERS (1.2 CU FT)	34 LITERS (1.2 CU FT)	17 LITERS (0.6 CU FT)	10 LITERS (0.35 CU FT)	CONTENTS

GAS MIXTURES

GAS	SYMBOL	TYPE	BALANCE	RANGE	WARRANTY
BENZENE	C ₆ H ₆	NON-REACTIVE	AIR	1 - 5 ppm	12 MO.
BUTANE	C ₄ H ₁₀	NON-REACTIVE	AIR	10 ppm - 0.9% vol.	24 MO.
CARBON DIOXIDE	CO ₂	NON-REACTIVE	AIR or NITROGEN	50 ppm - 100% vol.	24 MO.
CARBON MONOXIDE	CO	NON-REACTIVE	AIR or NITROGEN	10 - 2000 ppm	24 MO.
ETHYLENE	$C_2^{H_4}$	NON-REACTIVE	AIR	10 ppm - 1.35% vol.	24 MO.
HELIUM	He	NON-REACTIVE	N/A	100% vol.	24 MO.
HEXANE	C ₆ H ₁₄	NON-REACTIVE	AIR	10 ppm - 0.48% vol.	24 MO.
HYDROGEN	H_2	NON-REACTIVE	AIR or NITROGEN	10 ppm - 2.0% vol.	24 MO.
ISOBUTYLENE	C₄H ₈	NON-REACTIVE	AIR	10 ppm - 100 ppm	24 MO.
METHANE	CH₄	NON-REACTIVE	AIR or NITROGEN	10 ppm - 2.5% vol.	24 MO.
METHYL CHLORIDE	CH₃CI	NON-REACTIVE	AIR	10 ppm - 300 ppm	24 MO.
METHYLENE CHLORIDE	CH ₂ Cl ₂	NON-REACTIVE	AIR	10 ppm - 200 ppm	24 MO.
NITROGEN	N_2	NON-REACTIVE	N/A	100% vol.	24 MO.
OXYGEN	O ₂	NON-REACTIVE	NITROGEN	0.4% - 100% vol.	24 MO.
PENTANE	C ₅ H ₁₂	NON-REACTIVE	AIR	10 ppm - 0.75% vol.	24 MO.
PROPANE	C ₃ H ₈	NON-REACTIVE	AIR	10 ppm - 1.1% vol.	24 MO.
PROPYLENE	C ₃ H ₆	NON-REACTIVE	NITROGEN	50 ppm - 5.6% vol.	24 MO.
TOLUENE	C ₇ H ₈	NON-REACTIVE	AIR or NITROGEN	10 ppm - 100 ppm	24 MO.
ZERO AIR	N/A	NON-REACTIVE	N/A	20.9% OXYGEN/ NITROGEN	24 MO.

Non-Reactives available in 221, 103, 34LS, 17 Liter Steel Cylinders & 10 Liter Aerosol Cylinders

▼ NON-REACTIVE THREE GAS MIXTURES ▼

GASCO P/N SUFFIX	CARBON MONOXIDE	METHANE	PENTANE	OXYGEN	BALANCE	COMPANY	THEIR P/N
-301	50 PPM	50% LEL		20.9%	NITROGEN	BIOSYSTEMS	54-9041
-303E	50 PPM	1.62% = (50% L	EL) Propane equivalent	18%	NITROGEN	BIOSYSTEMS	54-9042E
-307	200 PPM	50% LEL		20.9%	NITROGEN	GFG	7800-016
-311	100 PPM		25% LEL	19%	NITROGEN	ISC	1810-1576
-314		1.45% = (58% L	.EL) Pentane simulant	15%	NITROGEN	MSA	478192
-314A	60 PPM	1.45% = (58% L	.EL) Pentane simulant	15%	NITROGEN	MSA	478191
-315	50 PPM	50% LEL		17%	NITROGEN	QUEST	54-145
-325	35 PPM		10% LEL	18%	NITROGEN	IST	585-110-036
-398	35 PPM	30% LEL	<u> </u>	18.5%	NITROGEN	N/A	N/A
-399		50% vol.	35% vol. CO ₂		NITROGEN	N/A	N/A

Non-Reactives available in 221, 103, 34LS, 17 Liter Steel Cylinders & 10 Liter Aerosol Cylinders

▼ REACTIVE FOUR GAS MIXTURES ▼

GASCO P/N SUFFIX	CARBON MONOXIDE	METHANE	PENTANE	HYDROGEN SULFIDE	OXYGEN	BALANCE	COMPANY	THEIR P/N
-403E	50 PPM	1.62% = (50% LEL) Propane equivalen	t 25 PPM	18%	NITROGEN	BIOSYSTEMS	54-9044E
-404	100 PPM	50% LEL		25 PPM	20.9%	NITROGEN	BW TECHNOL DRAEGER	CG-Q58 4594943
-406	50 PPM	50% LEL		25 PPM	18%	NITROGEN	BIOSYSTEMS	54-9043
-409	50 PPM	50% LEL		25 PPM	12%	NITROGEN	GASTECH/RKI	810154
-410			25% LEL	25 PPM	19%	NITROGEN	ISC	1810-2186
-411	100 PPM		25% LEL	25 PPM	19%	NITROGEN	ISC	1810-2187
-412	50 PPM	50% LEL		25 PPM	20.9%	NITROGEN	LUMIDOR RAE SYSTEMS DRAEGER	GFV207 600-0050-000 4594639
-414	300 PPM	1.45% = (58% LEL) Pentane simulant	10 PPM	15%	NITROGEN	MSA	804770
-415	95 PPM	30% LEL		25 PPM	18%	NITROGEN	ZELLWEGER	N600100100
-418	50 PPM	50% LEL		25 PPM	19%	NITROGEN	N/A	N/A
-421	100 PPM	50% LEL		25 PPM	18%	NITROGEN	N/A	N/A
-425	35 PPM		10% LEL	10 PPM	18%	NITROGEN	IST	585-110-034
-433	50 PPM	50% LEL 10	0 PPM SULFUR	DIOXIDE	20.9%	NITROGEN	LUMIDOR	GFV279
-490	35 PPM	10% LEL		10 PPM	18%	NITROGEN	IST	585-000-041

Reactives available in 74, 58, 34 & 10 Liter Aluminum Cylinders

ACCESSORIES







GD-HPCC-3

Carrying Cases

CC-58-AL

These Carrying Cases are ideal for safely storing and transporting gas detection equipment such as Gas Monitors, Gas Cylinders and Regulators. They are available in a soft canvas bag or a molded hard plastic case and are capable of holding any two 103, 58, 34 or 17 Liter Cylinders.



Gas Sampling Bags

A convenient, reliable and economical way of collecting airborne chemical hazards, especially where concentrations are above detection limits of analytical instruments.

- · Assessing exposure from spills and leaks.
- · Calibration gas standards.
- · Gas blending.
- · Grab sampling.
- Groundwater testing.
- Hazardous waste site sampling.
- Indoor air sampling.
- Leaking underground storage tanks.
- · Magnetic imaging.
- Sampling flues and vents.
- · Soil gas sampling.
- · Stack sampling.

Gaz Cal Gas Generator

Portable Electrochemical Calibration Gas Generator for Chlorine or Chlorine Dioxide Gas. Includes three digit LCD Display, rechargeable battery, battery charger, and one (1) meter of tubing. Housed in a black Pelican Case with shoulder strap.



GZ-CL2-10 Generating Range is 0.1 to 20 PPM CL2@ 1.0 LPM. GZ-CL2-05 Generating Range is 0.1 to 20 PPM CL2 @ 0.5 LPM.

Chlorine Dioxide Gas Generator





REPRESENTED BY: