



Meritus Gas Partner



BROCHURE
**GLOBAL
CALIBRATION
GASES**



*Gases are manufactured in an ISO
17025 accredited factory*

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OUR STORY

Global Calibration Gases LLC is a premier manufacturer of precision specialty gas mixtures to independent distributors of industrial, medical and specialty gases. Ray Borzio began his industry journey in 1973 and founded **Global Calibration Gases LLC** in Sarasota, Florida, in March 2009. Our combined resources have empowered dramatic expansion as a nationwide supplier and prime exporter of calibration gases to the Pacific Rim, Mexico, Latin America, South America, the Caribbean, Europe and the Middle East.

Today, we're a proud part of **Meritus Gas Partners**, a network of independent distributors. Together, we can give our customers an expanded resource base that means access to more gas industry products, expertise and solutions. This partnership also allows us to continue providing the individualized and local service and support that has earned our customers' business from the start.

Our Industry Expertise

We offer a complete line of certified gas mixtures, including specialty and custom binary blends. Our common mixtures are available in two grades — primary standard and certified standard. We're experts in low-volatility organic and multicomponent hydrocarbon mixtures, and our staff has the skills to help you identify the best solution for your needs. Regardless of your selection, each is produced to industry tolerances and accuracies and verified against accepted accreditation guidelines.

Our core competency is manufacturing NIST-traceable calibration gases that conform to the latest EPA Traceability Protocol for Assay and Certification of Gaseous Calibration Standards. As part of this specialization, we annually participate in audits under the Protocol Gas Verification Program (PGVP ID #N22022). These audits assess our adherence to standards for source- and ambient-level concentrations.

Certified Facilities With Global Reach

The Sarasota campus is home to our state-of-the-art analytical laboratory, which has achieved certification under **ISO/IEC 17025:2017** for calibration and testing (**PJLA Certificate #69191**). Additionally, we manufacture our industrial gas mixtures under rigid quality control standards with multiple assurance verifications throughout the process to enhance our ISO scope, we are working to obtain ISO 17034 certification in 2025. (Shihab, bold the word " ISO 17034")

Our 10,000-plus-square-foot headquarters is strategically located, with multiple -transportation modes readily accessible. Choosing this location enables us to serve our local, national and global customers best.

Industries Served

Global Calibration Gases proudly serves worldwide customers spanning multiple industries, including the below sectors.

- ★ Aerospace
- ★ Pharmaceuticals
- ★ Petrochemicals
- ★ Petroleum refineries
- ★ Natural gas
- ★ Energy and power plants
- ★ Agriculture
- ★ Medical
- ★ Air and water quality
- ★ Semiconductor
- ★ Research facilities
- ★ Fiber optics

Specialty Gases

- ★ Certified calibration gases
- ★ Primary reference standards
- ★ Ultra-high purity and ultra-pure carrier (UPC) grade gases
- ★ Pure hydrocarbons
- ★ EPA protocol standards
- ★ Refrigerant gas mixes
- ★ Vehicle emissions standards
- ★ SF6, gas mixes
- ★ Electronic grade gases
- ★ Medical gases
- ★ Laser gases
- ★ Halocarbons
- ★ Refrigerants
- ★ Process chemicals



34 LT Aluminium Cylinder

Characteristic	
Pressure	500 Psi
Gas Type	Reactive / Non-Reactive
Dimensions	10.64" x 3.125"
Material	Aluminum Alloy
Weight	1 lb 15 oz
Valve Inlet	5/8"-18 UNF (C10)

58 LT Aluminium Cylinder

Characteristic	
Pressure	500 Psi
Gas Type	Reactive / Non-Reactive
Dimensions	14.25" x 3.53"
Material	Aluminum Alloy
Weight	1 lb 12 oz
Valve Inlet	5/8"-18 UNF (C10)



116 LT Aluminium Cylinder

Characteristic	
Pressure	1,000 Psi
Gas Type	Reactive / Non-Reactive
Dimensions	14.25" x 3.53"
Material	Aluminum Alloy
Weight	2 lb 2 oz
Valve Inlet	5/8"-18 UNF (C10)





103 LT Steel Cylinder

Characteristic	
Pressure	1,000 Psi
Gas Type	Non-Reactive
Dimensions	13 1/2" x 3 1/4"
Material	Steel
Weight	3 lb
Valve Inlet	5/8"-18 UNF (C10)

34 LT Steel Cylinder

Characteristic	
Pressure	500 Psi
Gas Type	Non-Reactive
Dimensions	10.75" x 2.9"
Material	Steel
Weight	1 lb to 8oz
Valve Inlet	CGA 600



17 LT Steel Cylinder

Characteristic	
Pressure	240 Psi
Gas Type	Non-Reactive
Dimensions	10.75" x 2.9"
Material	Steel
Weight	1 lb
Valve Inlet	CGA 600



552 LT Steel Cylinder

Characteristic	
Pressure	2,200 Psi
Gas Type	Non-Reactive
Dimensions	25" x 4.5"
Material	Steel
Weight	11 lb
Valve Inlet	Varies by Gas Type

650LT/850 LT Aluminium Cylinder

Characteristic	
Pressure	1,650 Psi / 2,000 Psi
Gas Type	Reactive / Non-Reactive
Dimensions	19.25" x 5.25"
Material	Aluminum Alloy
Weight	15.8 lb
Valve Inlet	Varies by Gas Type



Lecture Bottle

Characteristic	
Pressure	1,800 Psi
Gas Type	Used mostly for pure gases but can be used for blends.
Dimensions	11.5", Bottle with valve 14.5", 2" wide
Material	Steel
Weight	2.0 lbs
Valve Inlet	Can fitted with CGA 180 or 170



AL265 High Pressure Aluminum Cylinder

Characteristic	
Water Capacity	46.4 LT
Service Pressure	153 Bar
Material	Aluminium Alloy
Diameter	248.9mm
Weight	38.4kg
Qualification	DOT-3AL/TC-3ALM

AL150 High Pressur Aluminum Cylinder

Characteristic	
Water Capacity	28.9 LT
Service Pressure	139 Bar
Material	Aluminium Alloy
Diameter	203.2 mm
Weight	22.3 kg
Qualification	DOT-3AL/TC-3ALM, ISO7866, UN ISO7866



AL80 High Pressure Aluminum Cylinder

Characteristic	
Water Capacity	15.7 LT
Service Pressure	153 bar
Material	Aluminium Alloy
Diameter	184.2 mm
Weight	13.7kg
Qualification	DOT-3AL/TC-3ALM



AL60 High Pressure Aluminum Cylinder

Characteristic	
Water Capacity	10.5 LT
Service Pressure	153 Bar
Material	Aluminium Alloy
Diameter	184.2mm
Weight	10.1kg
Qualification	DOT-3AL/TC-3ALM

AL30 High Pressure Aluminum Cylinder

Characteristic	
Water Capacity	5.9 LT
Service Pressure	153 Bar
Material	Aluminium Alloy
Diameter	175 mm
Weight	6.3 kg
Qualification	DOT-3AL/TC-3ALM, ISO7866, UN ISO7866



K200 High Pressure Steel Cylinder

Characteristic	
Water Capacity	43.3 LT
Service Pressure	156 Bar
Material	Steel
Diameter	232 mm
Weight	49.4 kg
Qualification	DOT-3AA2265



T300 High Pressure Steel Cylinder

Characteristic	
Water Capacity	49 LT
Service Pressure	166 Bar
Material	Steel
Diameter	232 mm
Weight	54.4 kg
Qualification	DOT-3AA2400

High Pressure Cylinders Table

Cylinder Type	AL265	AL150	AL 80	AL 60	AL 30	K200	T300
Water Capacity (litres)	46.4 LT	28.9 LT	15.7 LT	10.5 LT	5.9 LT	43.3 LT	49 LT
Diameter	248.9mm	203.2 mm	184.2 mm	184.2mm	175 mm	232 mm	232 mm
Length (excludes valve)	1313mm	1198 mm	828 mm	582mm	388 mm	1280 mm	1435 mm
Weight	38.4kg	22.3 kg	13.7kg	10.1kg	6.3 kg	49.4 kg	54.4kg
Service pressure	153 Bar	139 Bar	153 bar	153 bar	153 Bar	156 Bar	166 Bar
Material	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	Aluminium Alloy	Steel	Steel
Gas Volume (Estimation only. Pls send enquiry for actual volume)	6938 LT	3930 LT	2347 LT	1568 LT	883 LT	6088 LT	7,928 LT
Qualification	DOT-3AL/ TC-3ALM	DOT-3AL/ TC-3ALM, ISO7866, UN ISO7866	DOT-3AL/ TC-3ALM	DOT-3AL/ TC-3ALM	DOT-3AL/ TC-3ALM, ISO7866, UN ISO7866	DOT-3AA2265	DOT-3AA2400



Demand Flow Regulator

Characteristic	
Valve Inlet	C-10 , CGA 600 and other CGA specific
Outlet	3/16" Barb
Flow Rate	0-3.0 LPM @ 3" WC
Gauge PSI	1,200 Psi
Material	Brass, Nickel Plated Brass / Stainless Steel

Fixed Flow Regulator

Characteristic	
Valve Inlet	C-10, CGA 600 and other CGA specific
Outlet	3/16" Barb
Flow Rate	0.2 – 6.0 LPM
Gauge PSI	1,500 Psi
Material	Stainless Steel and Brass / Nickel Plated Brass



Fixed Flow Regulator - CGA 600

Characteristic	
Valve Inlet	CGA 600
Outlet	3/16" Barb
Flow Rate	0.2 – 6.0 LPM
Gauge PSI	1,500 Psi
Material	Brass / Nickel Plated Brass





Dial - A - Flow Regulator

Characteristic	
Valve Inlet	C-10
Outlet	3/16" Barb
Flow Rate	0.3 - 8.0 LPM
Gauge PSI	1,200 Psi
Material	Brass / Nickel Plated & Stainless Steel

Accessories

Devalving Tool C10 Cylinder Valve

Characteristic	
Cylinder Outlet	C10
Cylinder Compatibility	34 Liter Alu, 58 Liter Alu, 103 Liter Steel, 116 LT Alu cylinder
Dimensions	H : 2", W : 0.5", L : 3"
Thread Type	Female / External



Devalving Tool CGA 600 Cylinder Valve

Characteristic	
Cylinder Outlet	CGA 600
Cylinder Compatibility	17 & 34 Liter Steel Cylinder
Dimensions	H : 2", W: 0.5", L : 3"
Thread Type	Male / Internal



Cylinder Carrying Case (Soft)

Characteristic	
Carrying Capacity	Has two side pockets or storing accessories such as regulators and gas tubings
Cylinder Compatibility	34 LT, 58 LT, 103 LT, 116 LT
Material	Soft Nylon
Dimensions	14" x 4.5" x 4.5"

Cylinder Carrying Case (Hard)

Characteristic	
Carrying Capacity	2 cylinder, gas regulators and gas tubing
Cylinder Compatibility	34LT, 58LT, 103LT, 116LT
Material	Hard Plastic
Dimensions	24" x 9" x 5"
Case Type	Hard



Teflon Tubing

Characteristic	
Inner Diameter	4.76 mm
Outer Diameter	7.94 mm
Material	Teflon
Gas Type	Reactive Gas
Length	3ft-100ft, Customize upon request
Color	Transparent

Tygon Tubing

Characteristic	
Inner Diameter	4.8 mm
Outer Diameter	8 mm
Material	Tygon
Gas Type	Non Reactive Gas
Length	3ft-100ft, Customize upon request
Color	Transparent



Analytical Accuracy and Blend Tolerance

Range	Certified Blend Tolerance	Certified Analytical Accuracy
1000ppm -50%	+/-10%	+/-2%
10.1ppm to 999ppm	+/-10%	+5% +/-2% for some gas components
1.1ppm to 10ppm	+20%	+/-10%
0.1ppm to 1ppm	+/-40%	+/-20%

** Subject to changes and may vary. Please refer to your quotation for confirmation*

Shelf Life

Non Reactive Blends	
Acetylene, Argon, Benzene, Butane, Butadiene, Carbon Dioxide, Carbon Monoxide, Ethane, Ethanol, Ethylene, Freon, Helium, Hexane, Hydrogen, Isobutane, Isobutylene, Methane, Methyl Chloride, Nitrogen, Nitrous Oxide, Oxygen, Pentane, Propane, Propylene, Toluene	60 Months
Reactive Blends	
(SO ₂ or H ₂ S or Ammonia) 4 Mix with SO ₂ and H ₂ S	24 Months
Highly Reactive Blends	
Ethylene Oxide, Hydrogen Chloride, Hydrogen Cyanide, Phosphine, Chlorine, Nitric Oxide, Nitrogen Dioxide Blends	12 Months
Low PPM Highly Reactive <2ppm	
Ethylene Oxide, Hydrogen Chloride, Hydrogen Cyanide, Phosphine, Chlorine, Nitric Oxide, Nitrogen Dioxide Blends	3 months

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