

Pure Gases.

Air Liquide offers an extensive range of Pure Gases for all your laboratory and analytical needs.



PURE GASES

Air Liquide is one of the largest producers of pure gases globally. Because we produce most of these gases ourselves, we closely control the quality and consistency of each gas. Our customers can be sure of getting the best quality we can offer for every gas we produce. We also offer many different packaging options for the various products we produce, ranging from small lecture bottles up to bulk delivery for certain products.

PURITY GRADES

Air Liquide offers several different grades of most pure products we sell. These grades have been selected based on the typical applications where they are commonly used. We also offer our trademarked Alphagaz™ products that are designed to eliminate some of the confusion in ordering Specialty Gases. Our Alphagaz 2 products are recommended for those applications requiring the highest purity products. Alphagaz 1 is designed for most common applications for Laboratory and Analytical Instruments.

Alphagaz HP is designed for general-purpose applications where purity of the gas is not critical. Alphagaz 1000 is liquefied argon, nitrogen or helium and recommended for applications like ICP-MS or NMR. Our Alphagaz™ Product Line helps to eliminate the confusion of the many different grades used in the Specialty Gas Industry.

SELECTING THE RIGHT PRODUCTS FOR ANALYTICAL INSTRUMENTATION

Choosing the right gas products for a particular analytical instrument and the application that it is intended to be used can be confusing. The manufacturers in the gas industry have introduced a multitude of gas grades, which can lead to the confusion in selecting the best grade for your application. Air Liquide has simplified the selection by reducing the complex matrix of gas grades down to three different purities. The purity level for these three grades was determined by studying the various instruments that require these gases and optimizing the impurity levels to yield the best instrument performance. Instead of focusing on the total purity of the gas, we set the limits on the critical impurities that can affect the performance of the instrument and application it is used for. Following is a list of the commonly used detectors for analysis in laboratories today and the impurities in the gases used that could affect performance.

We closely control the quality and consistency of each gas.



IMPURITIES AFFECTING GAS DETECTORS

Flame Ionization Detector (FID) Hydrocarbons in the carrier gases, fuel gases and oxidizer gases can decrease detector sensitivity and reduce the life of the detector. Trace oxygen and moisture in the carrier gas can damage chromatographic columns.

Thermal Conductivity Detector (TCD) Trace hydrocarbons and oxygen in the carrier gas can corrode the filament detector wires and reduce sensitivity.

Electron Capture Detector (ECD) Moisture and oxygen in the carrier gas can reduce response of detector. Trace halocarbons in the nuclear counter gas (P-5 mixture) can cause baseline shift or negative peaks.

Chemiluminescence Detector (CD) These detectors are affected by the presence of trace levels of the specific compounds that they are designed to measure. Trace levels of sulfur for example often causes a shift in response.

Discharge Ionization Detector (DID) Trace levels of oxygen, moisture and hydrocarbons can reduce detector response and affect baseline stability.

Pulsed Discharge Helium Ionization Detector (PDHID)
Trace levels of oxygen, moisture and hydrocarbons can reduce detector response and affect baseline stability.

Photo Ionization Detector (PID) Trace levels of oxygen, moisture and hydrocarbons can reduce detector response and affect baseline stability.

Helium Ionization Detector (HID) Trace levels of hydrocarbons, oxygen or moisture can affect detector stability.

Fourier Transform Infrared Detector (FTIR)
Impurities present in the carrier gas with absorbance bands at the same wavelength as the species being measured can result in inaccurate response. Moisture and oxygen can interfere with IR spectra.

Pulsed Discharge Electron Capture Detector (PDECD) Moisture and oxygen in the carrier gas can reduce response of detector. Trace halocarbons in the nuclear counter gas (P-5 mixture) can cause baseline shift or negative peaks.

Pulsed Discharge Photo Ionization Detector (PDPID) Trace levels of oxygen, moisture and hydrocarbons can reduce detector response and affect baseline stability.

Pulsed Flame Photometric Detector (PFPD)
Trace levels of oxygen, moisture and hydrocarbons can reduce detector response and affect baseline stability. Contaminants in flame fuel and oxidizer can interfere with detector response.

Mass Spectroscopy Detector (MS) Impurities with atomic mass at the equivalent of the species being measured can result in inaccurate response.

Choosing the right gas products for a particular analytical instrument can be confusing.



Acetylene (C₂H₂)

Synonyms: Ethyne

Molecular Weight: 26.04

MSDS Index: 10002

Product Specifications

	Alphagaz 1
Nitrogen	< 0.4%
Phosphine	< 50 ppm*
Minimum Purity	99.60%

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
ALPHAGAZ 1	355A - LG	70	330 (11.3)	250 (1724)	227 (102.9)

Safety Information

Flammable Gas Flammability Limits in Air Lower: 2.5% Upper: 82%

Acetylene decomposes at high pressure. **Do not discharge at pressure higher than 15 psig.**

An in-line flash arrestor is recommended for this product to prevent flash back in lines.

Caution: may form explosive compounds with certain metals like copper, mercury or silver.

Additional safety information in the Appendices of this catalog or the Gaz Encyclopedia.

Application Notes

Alphagaz 1 Acetylene is certified for the use with Atomic Absorption Spectrophotometry

Alphagaz 1 Grade Acetylene is designed to replace AA or PP grade acetylene.

Recommended Equipment

CGA Valve 510
Pressure Regulator
Single-Stage Brass, 0-15 psig outlet
ALA-202
Flash Arrestor 4391

Shipping Information

UN Number 1001
Hazard Class 2.1
DOT Name Acetylene
DOT Label Flammable Gas
CAS Number 74-86-2

Air

Synonyms: Synthetic Air, Blended Air

MSDS Index: 10003

Product Specifications

	Alphagaz 1	CEM Zero	VOC Free	Vehicle Emission	Alphagaz HP
Oxygen	20-22%	20-22%	20-22%	20-22%	20-23%
Moisture	< 3 ppm	< 2 ppm	< 2 ppm	< 2 ppm	< 5 ppm
Total Hydrocarbons	< 0.1 ppm	< 0.1 ppm	< 0.1 ppm	< 1 ppm	< 2 ppm
Carbon Dioxide	< 1 ppm*	< 1 ppm	< 1 ppm*	< 1 ppm*	
Carbon Monoxide	< 1 ppm*	< 0.5 ppm	< 0.1 ppm*	< 1 ppm*	
NO _x		< 0.1 ppm*		< 0.1 ppm*	
SO _x		< 0.1 ppm*			

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Shipping Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
Alphagaz 1	365A-49X	49	283 (8.0)	2640 (18203)	166 (75.5)
	365A-44	44	238 (6.7)	2265 (15617)	150 (68.2)
	365A-44/6	44 x 6	1428 (40.5)	2265 (15617)	1030 (467)
	365A-49/16	49 x 16	4960 (140.8)	2640 (18203)	2916 (1322)
	365A-16	16	78 (2.2)	2000 (13790)	71 (32.3)
CEM Zero	368-49	49	283 (8.0)	2400 (16548)	166 (75.5)
	368-44	44	238 (6.7)	2265 (15617)	150 (68.2)
	368-30AL	30AL	144 (4.1)	2000 (13790)	80 (36.3)
VOC Free	372-30AL	30AL	144 (4.1)	2000 (13790)	80 (36.3)
Vehicle Emission Zero	371-49	49	283 (8.0)	2400 (16548)	166 (75.5)
	371-44	44	238 (6.7)	2265 (15617)	150 (68.2)
Alphagaz HP	362A-49X	49	283 (8.08)	2640 (18203)	166 (75.5)
	362A-44	44	238 (6.7)	2265 (15617)	150 (68.2)
	362A-LB	LB	2 (0.06)	1775 (12239)	3.5 (1.6)

Safety Information

Not for human consumption.

Application Notes

Alphagaz 1 Air replaces Ultra-Zero, Zero, and UHP grades used for FID Detectors.

CEM Zero, VOC Free, and Vehicle Emission Zero used for baseline calibration of emission monitors.

Recommended Equipment

CGA Valve 590
Pressure Regulator
Two-Stage Brass, Alphagaz 1000 Series
SS, Alphatech Reg

Shipping Information

UN Number 1002
Hazard Class 2.2
DOT Name Air, Compressed
DOT Label Nonflammable Gas
CAS Number Oxygen 7782-44-7
Nitrogen 7727-37-9

Ammonia (NH₃)

Synonyms: Anhydrous Ammonia

Molecular Weight: 17.03

MSDS Index: 20006

Product Specifications

	Anhydrous
Moisture	< 50 ppm*
Purity	> 99.99%

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
Anhydrous	3131-150LB	125	150 (68)	114 (787)	318 (144)

Note: This product is not stocked at most locations and is available only on special order.

Safety Information

Toxic Gas – avoid inhalation of vapors. TLV = 25 ppm. Skin contact with liquid can cause frostbite upon evaporation.

Ammonia is a flammable gas in air in the 16-25% range although it is classified as nonflammable in cylinders.

Ammonia is a weak base that can react with acids, strong oxidizers and halogens.

Application Notes

Ammonia is commonly used as a refrigerant and for chemical synthesis.

Recommended Equipment

CGA Valve 705
Pressure Regulator
Single-Stage Stainless Steel ALA-455-5301-705

Shipping Information

UN Number 1005
Hazard Class 2.2
DOT Name Ammonia, Anhydrous
DOT Label Nonflammable Gas
CAS Number 7664-4-7

Argon (Ar)

Molecular Weight: 39.95

MSDS Index: 10016

Product Specifications

	Alphagaz 2	Alphagaz 1	Alphagaz HP	Alphagaz 1000
Moisture	< 0.5 ppm	< 3 ppm	< 5 ppm	< 3 ppm
Oxygen	< 0.5 ppm	< 2 ppm	< 5 ppm	< 2 ppm
Total Hydrocarbons	< 0.1 ppm	< 0.5 ppm	< 2 ppm	< 0.5 ppm
Carbon Dioxide	< 0.5 ppm	< 1 ppm*		< 1 ppm*
Carbon Monoxide	< 0.1 ppm	< 0.5 ppm*		< 0.5 ppm*
Nitrogen	< 5 ppm	< 5 ppm*		
Hydrogen	< 0.1 ppm			
Purity	> 99.9995%	> 99.999%	> 99.995%	> 99.999%

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	398A-49+	49	336 (9.5)	2640 (18203)	177 (80.5)
	398A-44	44	255 (7.2)	2265 (15617)	158 (71.8)
Alphagaz 1	395A-49+	49	336 (9.5)	2640 (18203)	177 (80.5)
	395A-44	44	255 (7.2)	2265 (15617)	158 (71.8)
	395A-44/6	44 x 6	1530 (43.2)	2265 (15617)	1023 (464)
	395A-49/16	49 x 16	5376 (152)	2640 (18203)	3096 (1402)
	395A-16	16	83 (2.4)	2000 (13790)	74 (33.6)
Alphagaz HP	362A-49+	49	366 (9.5)	2640 (18203)	177 (80.5)
	362A-44	44	255 (7.2)	2265 (15617)	158 (71.8)
Alphagaz 1000 Liquid Argon	394A-160H	160L	4796 (136)	235 (1681)	775 (351)
	394A-180H	180L	4800 (141)	235 (1681)	815 (369)
	394A-230H	230L	5850 (166)	235 (1681)	1019 (462)

Safety Information

Argon displaces oxygen in confined spaces and will not support life. Liquid argon can cause frostbite when in contact with skin.

Application Notes

Alphagaz 2 Argon replaces Research Grade. Alphagaz 1 Argon replaces UHP and Zero Grades. Argon is an inert gas that is commonly used for lighting, blanketing and window insulation. Argon may also be used as a carrier gas for gas chromatography. Alphagaz 1000 argon is commonly used for ICP-MS instrumentation.

Recommended Equipment

CGA Valve 580
Pressure Regulator
Two-Stage Brass, Alphagaz 1000 Series
Two-Stage SS, Alphatech Reg

Shipping Information

UN Number 1006
Hazard Class 2.2
DOT Name Argon
DOT Label Nonflammable Gas
CAS Number 70-37-1

Carbon Dioxide (CO₂)

Synonyms: Carbonyl Anhydride

Molecular Weight: 44.01

MSDS Index: 10040

Product Specifications

	Alphagaz 2	SFC Grade	Alphagaz 1
Oxygen	< 2 ppm	< 2 ppm	< 10 ppm
Moisture	< 5 ppm	< 5 ppm	< 10 ppm
Total Hydrocarbons	< 2 ppm	< 2 ppm	
Nitrogen	< 8 ppm*	< 50 ppm	
Hydrogen	< 5 ppm	< 5 ppm*	
Carbon Monoxide	< 5 ppm	< 5 ppm*	
Argon	< 5 ppm*	< 5 ppm*	
Methane		< 2 ppm*	
Purity	> 99.999%	> 99.995%	> 99.99%

Note: All measurements made on liquid phase

*Indicates a typical property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	525A-44	44	50 (22.7)	830 (5723)	183 (83)
	525A-30AL	30AL	35 (15.9)	830 (5723)	85 (38.4)
	525A-1	1	0.4 (0.18)	830 (5723)	6.4 (2.9)
SFC	536-44	44	50 (22.7)	830 (5723)	183 (83)
	536-30AL	30 AL	35 (15.9)	830 (5723)	85 (38.4)
Alphagaz 1	534A-44	44	50 (22.7)	830 (5723)	183 (83)

Note: Please specify if dip tube is needed for liquid withdrawal.

Safety Information

Cold gas or liquid can cause frostbite.

Application Notes

Alphagaz 1 replaces Bone Dry, Coleman, and Extra Dry Grades.

Recommended Equipment

CGA Valve 320

Pressure Regulator

ALA-CCA-308 Heated

Shipping Information

UN Number 1013

Hazard Class 2.2

DOT Name Carbon Dioxide

DOT Label Nonflammable Gas

CAS Number 124-38-9

Carbon Monoxide (CO)

Synonyms: Carbonic Oxide

Molecular Weight: 28.01

MSDS Index: 20022

Product Specifications

	Research	C.P.	Technical
Oxygen	< 5 ppm	< 5 ppm	< 10 ppm
Moisture	< 5 ppm*	< 5 ppm*	< 5 ppm*
THC	< 10 ppm		
H2	< 30 ppm	< 15 ppm*	< 25 ppm*
N2	< 200 ppm	< 5000 ppm*	< 5000 ppm*
Ar	< 1 ppm	< 2500 ppm*	< 2500 ppm*
CO2	< 15 ppm	< 25 ppm*	< 25 ppm*
CH4	< 5 ppm	< 25 ppm*	< 25 ppm*
Purity	> 99.97%	> 99.5%	> 99.0%

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
Research	3794-44	44	175 (5.0)	1660 (11446)	145 (65.9)
C.P.	3798-49	49	236 (6.7)	2000 (13790)	160 (72.6)
	3798-44	44	175 (5.0)	1660 (11446)	145 (65.9)
Technical	3806-49	49	236 (6.7)	2000 (13790)	160 (72.6)
	3806-44	44	175 (5.0)	1660 (11446)	145 (65.9)

Safety Information

Flammable Gas Flammability in Air Lower: 12.5% Upper: 74%

Poison Gas Use Carbon Monoxide Monitors in enclosed spaces.

Application Notes

Carbon Monoxide is often used for synthesis.

Recommended Equipment

CGA Valve 350

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number 1016

Hazard Class 2.3

DOT Name Carbon Monoxide

DOT Label Poison Gas, Flammable

CAS Number 630-08-0

Ethane (C₂H₆)

Synonyms: Ethyl Hydride

Molecular Weight: 30.07

MSDS Index: 20061

Product Specifications

	Research	C.P.
Oxygen	< 1 ppm	
Moisture	< 50 ppm	< 100 ppm
Nitrogen	< 100 ppm	< 100 ppm*
Carbon Dioxide	< 5 ppm	< 10 ppm*
Carbon Monoxide	< 5 ppm	< 10 ppm*
Hydrogen	< 1 ppm*	
Methane	< 100 ppm*	< 100 ppm*
Purity	> 99.98%	> 99.5%

Liquid Phase Measurements

*Denotes Typical Properties

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Research	4231-44	44	32 (14.5)	543 (3744)	146 (66.3)
	4231-1	1	1 (0.454)	543 (3744)	7 (3.2)
	4231-LB	LB	0.25 (0.113)	543 (3744)	6 (3)
C.P.	4230-16	16	12.4 (5.6)	543 (3744)	75 (34)
	4230-44	44	32 (14.5)	543 (3744)	146 (66.3)
	4230-44/6	44	204 (92.5)	543 (3744)	951 (431)

Safety Information

Flammable Gas

Flammability Limits in Air

Lower: 3.0%

Upper: 12.4%

Application Notes

Ethane is used as a starting material for synthesis reactions.

Recommended Equipment

CGA Valve 350

Pressure Regulator

Two-Stage Brass Regulator

Alphagaz 1000 Series

Shipping Information

UN Number 1035

Hazard Class 2.1

DOT Name Ethane

DOT Label Flammable Gas

CAS Number 78-84-0

Ethylene (C₂H₄)

Synonyms: Ethene

Molecular Weight: 28.1

MSDS Index: 20065

Product Specifications

	Research	UHP	Polymer	C.P.	Technical
Oxygen	< 2 ppm	< 5 ppm	< 15 ppm	< 25 ppm	< 500 ppm
Nitrogen	< 5 ppm	< 15 ppm	< 500 ppm	< 3500 ppm	< 0.3%
Moisture	< 1 ppm	< 1 ppm	< 3 ppm	< 5 ppm	< 50 ppm
Carbon Monoxide	< 1 ppm	< 1 ppm	< 1 ppm	< 5 ppm	< 10 ppm
Carbon Dioxide	< 1 ppm	< 1 ppm	< 1 ppm	< 5 ppm	< 10 ppm
Methane	< 15 ppm	< 15 ppm	< 50 ppm	< 100 ppm	< 0.10%
Purity	> 99.99%	> 99.96%	> 99.9%	> 99.5%	> 98%

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Research	4256-LBX	LBX	0.3 (0.28)	1200 (8274)	5 (2.2)
	4256-44	44	30 (13.6)	1200 (8274)	142 (64.5)
	4256-49	49	37 (16.8)	1200 (8274)	180 (81.8)
UHP	4257-44	44	30 (13.6)	1200 (8274)	142 (64.5)
	4257-49	49	37 (16.8)	1200 (8274)	180 (81.8)
Polymer	4250-44	44	30 (13.6)	1200 (8274)	142 (64.5)
	4250-44/6	44 x 6	180 (81.6)	1200 (8274)	927 (420)
C.P.	4254-44	44	30 (13.6)	1200 (8274)	142 (64.5)
	4254-44/6	44 x 6	180 (81.6)	1200 (8274)	927 (420)
	4254-49	49	37 (16.8)	1200 (8274)	180 (81.8)
Technical	4258-49	49	37 (16.8)	1200 (8274)	180 (81.8)
	4258-44	44	30 (13.6)	1200 (8274)	142 (64.5)

Safety Information

Flammable Gas Flammability in Air Lower: 2.7% Upper: 36%

Do not use for medical applications.

Application Notes

Technical Grade may be sold for crop applications in permitted states. Please specify product registered with FIFRA when ordering.

Recommended Equipment

CGA Valve 350

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number 1962

Hazard Class 2.1

DOT Name Ethylene, Compressed

DOT Label Flammable Gas

CAS Number 74-85-1

Helium (He)

Synonyms:

Molecular Weight: 4.003

MSDS Index: 10047

Product Specifications

	Alphagaz 2	Alphagaz 1	Alphagaz HP	Alphagaz 1000
Moisture	< 0.5 ppm	< 3 ppm	< 5 ppm	< 3 ppm
Oxygen	< 0.5 ppm	< 2 ppm	< 5 ppm	< 2 ppm
THC	< 0.1 ppm	< 0.5 ppm	< 2 ppm	< 0.5 ppm
Carbon Monoxide	< 0.1 ppm	< 1 ppm*		< 1 ppm*
Carbon Dioxide	< 0.5 ppm	< 1 ppm*		< 1 ppm*
Nitrogen	< 0.4 ppm	< 5 ppm*		< 5 ppm*
Hydrogen	< 0.1 ppm*			
Purity	> 99.9999%**	> 99.9999%**	> 99.995%	> 99.9999%**

* Denote Typical Property ** Excluding Neon

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m3)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	628A-49+	49	291 (8.2)	2640 (18203)	146 (66.4)
	628A-44	44	223 (6.3)	2265 (15617)	135 (61.4)
Alphagaz 1	625A-49+	49	291 (8.2)	2640 (18203)	146 (66.4)
	625A-44	44	223 (6.3)	2265 (15617)	135 (61.4)
	625A-44/6	44 x 6	1338 (37.9)	2265 (15617)	885 (401)
	625A-49/16	49 x 16	4256 (1312)	2640 (18203)	2596 (1177)
Alphagaz HP	622A-49+	49	291 (8.2)	2640 (18203)	146 (66.4)
	622A-44	44	223 (6.3)	2265 (15617)	135 (61.4)
Alphagaz 1000	624A-60L	60L	1598 (46)	10 (71)	
	624A-100L	100L	2663 (75)	10 (71)	202 (92)
	624A-250L	250L	6670 (189)	10 (71)	223 (146)
	624A-500L	500L	13540 (383)	10 (71)	

Safety Information

Helium is an inert gas which does not support life.

Application Notes

Alphagaz 2 replaces research and carrier grades.

Alphagaz 1 replaces UHP and zero grades.

Alphagaz HP replaces Instrument and Chromatographic grades.

Alphagaz 1000 Liquid Helium is intended for NMR instrument cooling.

Recommended Equipment

CGA Valve 580

Pressure Regulators

Two-Stage Brass, Alphagaz 1000 Series

Two-Stage SS, Alphatech Reg

Shipping Information

UN Number 1046

Hazard Class 2.2

DOT Name Helium

DOT Label Nonflammable Gas

CAS Number 7440-59-7

Hydrogen (H₂)

Molecular Weight: 2.016

MSDS Index: 10050

Product Specifications

	Alphagaz 2	Alphagaz 1	Alphagaz HP
Moisture	< 0.5 ppm	< 3 ppm	< 5 ppm
Oxygen	< 0.5 ppm	< 2 ppm	< 5 ppm
Total Hydrocarbons	< 0.1 ppm	< 0.5 ppm	< 2 ppm
Carbon Monoxide	< 0.1 ppm	< 1 ppm*	
Carbon Dioxide	< 0.5 ppm	< 1 ppm*	
Nitrogen	< 1 ppm		
Purity	> 99.9995%**	> 99.999%	> 99.995%

* Denotes Typical Property

**Excluding Nitrogen

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	698A-49	49	261 (7.4)	2400 (16548)	145 (65.9)
	698A-44	44	219 (6.2)	2265 (15617)	135 (60.9)
Alphagaz 1	695A-49	49	261 (7.4)	2400 (16548)	145 (65.9)
	695A-44	44	219 (6.2)	2265 (15617)	135 (60.9)
	695A-44/6	44 x 6	1341 (37.2)	2265 (15617)	885 (401)
	695A-49/16	49 x 16	3152 (118.4)	2400 (16548)	2580 (1170)
Alphagaz HP	692A-49	49	261 (7.4)	2400 (16548)	145 (65.9)
	692A-44	44	219 (6.2)	2265 (15617)	135 (60.9)

Safety Information

Flammable Gas Flammability in Air Lower: 4.0% Upper: 75%

Application Notes

Alphagaz 2 replaces Research Grade.

Alphagaz 1 replaces UHP and Zero grades.

Alphagaz HP replaces Instrument and Chromatographic grades.

Recommended Equipment

CGA Valve 350

Pressure Regulator

Two-Stage Brass Alphagaz 1000 Series

Two-Stage SS Alphatech Reg

Shipping Information

UN Number 1049

Hazard Class 2.1

DOT Name Hydrogen

DOT Label Flammable Gas

CAS Number 1333-74-0

Hydrogen Chloride (HCl)

Synonyms: Hydrochloric Acid Anhydride

Molecular Weight: 36.46

MSDS Index: 20095

Product Specifications

	Anhydrous
Moisture*	< 100 ppm
Purity	> 99.0%

*Denotes Typical Property

Note: All measurements made on liquid phase

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Anhydrous	4632-44	44	60 (27.2)	613 (4227)	193 (87.7)

Note: This product is not stocked at most locations and is available only on special order.

Safety Information

Hydrogen Chloride is a toxic, corrosive gas. Use proper protective equipment with this product.

Application Notes

Hydrogen Chloride is commonly used for chemical synthesis.

Recommended Equipment

CGA Valve 330

Pressure Regulator

Two-Stage SS

ALA-432

Shipping Information

UN Number 1050

Hazard Class 2.3

DOT Name Hydrogen Chloride

DOT Label Poison Gas, Corrosive

CAS Number 7647-01-0

Hydrogen Sulfide (H₂S)

Synonyms:

Molecular Weight: 34.08

MSDS Index: 20099

Product Specifications

	C.P.
Moisture*	< 100 ppm
Purity	> 99.5%

*Denotes Typical Property

Measurements made on Liquid Phase

Packaging Information

Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
C.P.	4690-44	44	60 (27.2)	252 (1737)	193 (87.7)

Note: This product is not stocked at most locations and is available only on special order.

Safety Information

Flammable Gas

Flammability in Air

Lower: 4.0%

Upper: 44%

Application Notes

Hydrogen Sulfide is commonly used to sulfide catalyst beds and for scrap metal processing.

Recommended Equipment

CGA Valve 330

Pressure Regulator

Two-Stage SS

ALA-432

Shipping Information

UN Number 1053

Hazard Class 2.3

DOT Name Hydrogen Sulfide, Liquefied

DOT Label Poison Gas, Flammable

CAS Number 7783-06-4

Isobutane (I-C₄H₁₀)

Synonyms: 2-Methyl Propane

Molecular Weight: 58.12

MSDS Index: 20101

Product Specifications

	Research	Instrument	C.P.
Oxygen	< 5 ppm	< 100 ppm	
Moisture	< 3 ppm	< 3 ppm	< 3 ppm
Nitrogen	< 20 ppm	< 400 ppm	
Purity	> 99.95%	> 99.5%	> 99.0%

Liquid Phase

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs (kg)	PSIG (kPa)	lbs (kg)
Research	4760-110	110	116 (52.6)	31 (214)	191 (86.8)
Instrument	4764-110	110	116 (52.6)	31 (214)	191 (86.8)
	4764-22LP	22LP	23 (10.4)	31 (214)	44 (20.0)
C.P.	4762-110	110	116 (52.6)	31 (214)	191 (86.8)
	4762-22LP	22LP	23 (10.4)	31 (214)	44 (20.0)

Safety Information

Flammable Gas

Flammability in Air

Lower: 1.8%

Upper: 8.4%

Application Notes

Isobutane is used as a solvent for packaging materials and as a propellant for aerosols. It is also used as a refrigerant gas.

Recommended Equipment

CGA Valve 510

Pressure Regulator

Single-Stage Brass

ALA-202

Shipping Information

UN Number 1969

Hazard Class 2.1

DOT Name Isobutane

DOT Label Flammable Gas

CAS Number 75-28-5

Isobutylene (C₄H₈)

Synonyms: 2-Methyl-1-Propene, Isobutene

Molecular Weight: 56.11

MSDS Index: 20103

Product Specifications

	Research	Instrument	C.P.
Oxygen	< 2 ppm	< 25 ppm	< 50 ppm
Moisture	< 1 ppm	< 10 ppm	< 20 ppm
Nitrogen	< 2 ppm	< 100 ppm*	< 100 ppm*
Purity	> 99.96%	> 99.5%	> 99.0%

Liquid Phase

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs (kg)	PSIG (kPa)	lbs (kg)
Research	4781-1	1	0.5 (0.2)	24 (165)	6 (2.7)
Instrument	4780-110	110	125 (56.8)	24 (165)	200 (90.9)
C.P.	4782-110	110	125 (56.8)	24 (165)	200 (90.9)
	4781-22LP	22LP	25 (11.3)	24 (165)	46 (20.9)

Safety Information

Flammable Gas Flammability in Air Lower: 1.8% Upper: 9.6%

Application Notes

Raw Material for synthesis and as a refrigerant.

Recommended Equipment

CGA Valve 510

Recommended Regulator

Single-Stage Brass

ALA-202

Shipping Information

UN Number 1055

Hazard Class 2.1

DOT Name Isobutylene

DOT Label Flammable Gas

CAS Number 115-11-7

Krypton (Kr)

Synonyms: NA

Molecular Weight: 83.8

MSDS Index: 20112

Product Specifications

	Research Plus	Research
Oxygen	< 1 ppm	< 2 ppm
Moisture	< 1 ppm	< 3 ppm
Total Hydrocarbons	< 0.5 ppm	< 1 ppm
Nitrogen	< 2 ppm*	< 10 ppm*
Hydrogen	< 1 ppm*	< 2 ppm*
Argon	< 1 ppm*	
Helium	< 1 ppm*	
Carbon Dioxide	< 1 ppm*	
Purity	> 99.999%	> 99.998%

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	ft3 (Ltr)	PSIG (kPa)	lbs (kg)
Research Plus	4886-49	49	282 (8000)	1819 (12541)	204 (93)
	4886-30AL	30AL	176.5 (5000)	2050 (14135)	80 (36.3)
Research	4888-49	49	282 (8000)	1819 (12541)	204 (93)
	4888-44	44	247 (7000)	1792 (12355)	187 (85)
	4888-30AL	30AL	176.5 (5000)	2050 (14135)	80 (36.3)

Safety Information

Inert gas that does not support life.

Application Notes

Krypton is used for lighting and for thermal window insulation.

Recommended Equipment

CGA Valve 580
Pressure Regulator
Two-Stage Brass
Alphagaz 1000 Series

Shipping Information

UN Number 1056
Hazard Class 2.2
DOT Name Krypton, Compressed
DOT Label Nonflammable Gas
CAS Number 7439-90-9

Methane (CH₄)

Synonyms: Methane (CH₄)

Molecular Weight: 16.04

MSDS Index: 10068

Product Specifications

	Research	UHP	C.P.	Technical
Oxygen	< 1 ppm	< 2 ppm	< 10 ppm	< 1000 ppm
Moisture	< 1 ppm	< 2 ppm	< 30 ppm	
Carbon Monoxide	< 1 ppm*	< 1 ppm*	< 5 ppm*	< 100 ppm*
Carbon Dioxide	< 1 ppm*	< 1 ppm*	< 50 ppm*	< 500 ppm*
Nitrogen	< 10 ppm*	< 75 ppm*	< 3000 ppm*	< 3000 ppm*
Purity	> 99.999%	> 99.99%	> 99.92%	> 98%

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	SCF (m ³)	PSIG (kPa)	lbs (kg)
Research	5018-49	49	355 (10.1)	2400 (16548)	162 (76.8)
	5018-44	44	295 (8.4)	2265 (15617)	144 (65.4)
UHP	5034-49	49	355 (10.1)	2400 (16548)	162 (76.8)
	5034-44	44	295 (8.4)	2265 (15617)	144 (65.4)
C.P.	5004-49	49	355 (10.1)	2400 (16548)	162 (76.8)
	5004-44	44	295 (8.4)	2265 (15617)	144 (65.4)
Technical	5032-49	49	355 (10.1)	2400 (16548)	162 (76.8)
	5032-44	44	295 (8.4)	2265 (15617)	144 (65.4)

Safety Information

Flammable Gas

Flammability Limits in Air

Lower: 5.0%

Upper: 15.4%

Application Notes

Methane is commonly used as a fuel and for synthesis.

Recommended Equipment

CGA Valve 350

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number

1971

Hazard Class

2.1

DOT Name

Methane, Compressed Gas

DOT Label

Flammable Gas

CAS Number

74-82-8

n-Butane (C₄H₁₀)

Synonyms: Normal Butane

Molecular Weight: 58.12

MSDS Index: 10035

Product Specifications

	Research	Instrument	C. P.
Moisture	< 3 ppm	< 3 ppm	< 5 ppm
Oxygen	< 2 ppm	< 200 ppm	
Nitrogen	< 5 ppm	< 500 ppm	
Purity	> 99.9%	> 99.5%	> 99.0%

Liquid Phase Specifications

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Research	3682-LB	LB	0.4 (0.2)	16 (110)	5 (2.3)
Instrument	5210-110	110	120 (54.5)	16 (110)	195 (88.5)
	5210-22LP	22LP	25 (11.5)	16 (110)	46 (20.9)
	5210-LB	LB	0.4 (0.2)	16 (110)	4 (1.8)
C. P.	5200-110	110	120 (54.5)	16 (110)	195 (88.5)
	5200-LB	LB	0.4 (0.2)	16 (110)	4 (1.8)

Safety Information

Flammable Gas Flammability Limits in Air Lower: 1.8% Upper: 8.4%

Not compatible with strong oxidizers.

Application Notes

Butane is commonly used as a raw material for synthesis and as a fuel gas for heating.

Recommended Equipment

CGA Valve 510
Pressure Regulator
Single-Stage Brass Barstock
ALA-202

Shipping Information

UN Number 1011
Hazard Class 2.1
DOT Name Butane
DOT Label Flammable Gas
CAS Number 106-97-8

Neon (Ne)

Synonyms: NA

Molecular Weight: 20.18

MSDS Index: 20131

Product Specifications

	Research	UHP
Oxygen	< 0.5 ppm	< 1 ppm
Moisture	< 1 ppm	< 1 ppm
Carbon Monoxide	< 1 ppm	< 1 ppm
Carbon Dioxide	< 0.5 ppm	< 1 ppm
Nitrogen	< 1 ppm	
Hydrogen	< 0.5 ppm	
THC	< 0.5 ppm	
Helium	< 1 ppm	
Krypton	< 2 ppm	
Purity	> 99.999%	> 99.996%

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	ft ³ (Ltr)	PSIG (kPa)	lbs. (kg)
Research	5282-49	49	261 (7400)	2400 (16536)	157 (71.4)
	5282-44	44	215 (6100)	2180 (14135)	144 (65.4)
UHP	5286-49	49	261 (7400)	2400 (16536)	157 (71.4)
	5286-44	44	215 (6100)	2180 (14135)	144 (65.4)

Safety Information

Neon is an inert gas that does not support life.

Application Notes

Neon is used for commercial lighting and for laser mixtures.

Recommended Equipment

CGA Valve 580

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number

1065

Hazard Class

2.2

DOT Name

Neon, Compressed

DOT Label

Nonflammable Gas

CAS Number

7440-01-9

Nitrogen (N₂)

Synonyms: NA

Molecular Weight: 28.01

MSDS Index: 10070

Product Specifications

	Alphagaz 2	Alphagaz 1	CEM Zero	Alphagaz HP	Alphagaz 1000
Moisture	< 0.5 ppm	< 3 ppm	< 2 ppm	< 5 ppm	< 3 ppm
Oxygen	< 0.5 ppm	< 2 ppm	< 0.5 ppm	< 5 ppm	< 2 ppm
Total Hydrocarbons	< 0.1 ppm	< 0.5 ppm	< 0.5 ppm	< 2 ppm	< 0.5 ppm
Carbon Monoxide	< 0.1 ppm	< 1 ppm*	< 1 ppm		< 1 ppm*
Carbon Dioxide	< 0.5 ppm	< 1 ppm*	< 1 ppm		< 1 ppm*
Hydrogen	< 0.1 ppm				
NO _x			< 0.1 ppm*		
SO _x			< 0.1 ppm*		
Purity	< 99.9995%**	> 99.999%	> 99.9995%**	> 99.995%	> 99.999%

*Denotes Typical Properties **Excluding Argon

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	ft ³ (m ³)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	768A-49+	49+	304 (8.6)	2640 (18203)	165 (75)
	768A-44	44	234 (6.6)	2265 (15617)	149 (67.7)
Alphagaz 1	765A-49	49+	304 (8.6)	2640 (18203)	165 (75)
	765A-44	44	234 (6.6)	2265 (15617)	149 (67.7)
	765A-44/6	44 x 6	1404 (39.6)	2265 (15617)	969 (439)
	765A-49/16	49 x 16	4464 (126.3)	2640 (18203)	2900 (1315)
CEM Zero Grade	7501-49+	49+	304 (8.6)	2640 (18203)	165 (75)
	7501-44	44	234 (6.6)	2265 (15617)	149 (67.7)
Alphagaz HP	762A-49+	49+	304 (8.6)	2640 (18203)	165 (75)
	762A-44	44	234 (6.6)	2265 (15617)	149 (67.7)
Alphagaz 1000	767A-160H	160L	3440 (97)	235 (1681)	565 (256)
	767A-180H	180L	4114 (116)	235 (1681)	580 (263)
	767A-230H	230L	5030 (142)	235 (1681)	719 (326)

Safety Information

Nitrogen is an inert gas that does not support life.

Application Notes

Nitrogen is used for blanketing and for purging.

Alphagaz 2 Nitrogen replaces Research and Carrier Grades. Alphagaz 1 replaces UHP and Zero Grades.

Alphagaz 1000 is recommended for ICP-MS and FTIR instrumentation.

Recommended Equipment

CGA Valve 580
Pressure Regulator
Two-Stage Brass
Alphagaz 1000 Series

Shipping Information

UN Number 1066
Hazard Class 2.2
DOT Name Nitrogen
DOT Label Nonflammable Gas
CAS Number 7727-37-9

Nitrous Oxide (N₂O)

Synonyms: Laughing Gas

Molecular Weight: 30.01

MSDS Index: 1072

Product Specifications

	C.P.
Oxygen	< 100 ppm
Moisture	< 10 ppm
Nitrogen	< 400 ppm
Purity	> 99.5%

Liquid Phase

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
C.P.	5590-49	49	55 (25)	745 (5137)	198 (90)
	5590-44	44	50 (22.7)	745 (5137)	183 (83.2)

Safety Information

Not for Medical Use.

Necessary approval is required for purchase of this product.

Product is not available with a dip tube in cylinder.

Application Notes

Certified for Atomic Absorption Spectrophotometers

Recommended Equipment

CGA Valve 326

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number 1070

Hazard Class 2.2

DOT Name Nitrous Oxide, Compressed

DOT Label Nonflammable Gas

CAS Number 10024-97-2

Oxygen (O₂)

Synonyms: NA

Molecular Weight: 32

MSDS Index: 10074

Product Specifications

	Alphagaz 2	Alphagaz 1	Alphagaz HP
Moisture	< 0.5 ppm	< 3 ppm	< 5 ppm
Total Hydrocarbons	< 0.1 ppm	< 0.5 ppm	< 2 ppm
Carbon Monoxide	< 0.1 ppm	< 1 ppm*	
Carbon Dioxide	< 0.5 ppm	< 1 ppm*	
Nitrogen	< 3 ppm		
Hydrogen	< 0.1 ppm		
Purity	> 99.9995%	> 99.999%	> 99.995%

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	ft ³ (m ³)	PSIG (kPa)	lbs. (kg)
Alphagaz 2	908A-49	49+	337 (9.5)	2640 (18203)	170 (77.3)
	908A-44	44	256 (6.6)	2265 (15617)	153 (69.5)
Alphagaz 1	905A-49+	49+	337 (9.5)	2640 (18203)	170 (77.3)
	905A-44	44	256 (6.6)	2265 (15617)	153 (69.5)
	905A-44/6	X 6	1536 (39.6)	2265 (15617)	993 (450)
Alphagaz HP	902A-49+	49+	337 (9.5)	2640 (18203)	170 (77.3)
	902A-44	44	256 (6.6)	2265 (15617)	153 (69.5)

Safety Information

Strong oxidizer. Supports combustion

Application Notes

Oxygen is commonly used as an oxidizer for flames.

Alphagaz 2 Oxygen replaces Research Grade and UltraOx™ Grade

Alphagaz 1 Oxygen replaces UHP and Zero Grades

Recommended Equipment

CGA Valve 540

Pressure Regulator

Two-Stage Brass

ALA-412

Shipping Information

UN Number 1072

Hazard Class 2.2, 5.1

DOT Name Oxygen

DOT Label Oxidizer

CAS Number 7782-44-7

Propane (C₃H₈)

Synonyms: Liquefied Natural Gas

Molecular Weight: 44.1

MSDS Index: 10076

Product Specifications

	Research	Instrument	C.P.
Oxygen	< 2 ppm	< 100 ppm*	
Moisture	< 2 ppm	< 3 ppm	< 3 ppm*
Nitrogen	< 2 ppm*	< 400 ppm*	
Methane	< 2 ppm*		
Purity	> 99.95%	> 99.5%	> 99.0%

Liquid Phase

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Research	943-LB	LB	0.3 (0.14)	110 (758)	4 (1.8)
Instrument	944-110	110	95 (43.1)	110 (758)	169 (76.6)
	944-22LP	22LP	20 (9.1)	110 (758)	41 (18.6)
C.P.	941-110	110	95 (43.1)	110 (758)	169 (76.6)
	941-22LP	22LP	20 (9.1)	110 (758)	41 (18.6)

Safety Information

Flammable Gas Flammability Limits in Air Lower: 2.1% Upper: 9.5%

Application Notes

Used as a fuel gas. Also used as a propellant for packaging.

Recommended Equipment

CGA Valve 510
Pressure Regulator
Single-Stage Brass
ALA-202

Shipping Information

UN Number 1978
Hazard Class 2.1
DOT Name Propane
DOT Label Flammable Gas
CAS Number 74-98-6

Propylene (C₃H₆)

Synonyms: Propene

Molecular Weight: 42.08

MSDS Index: 20146

Product Specifications

	Research	Instrument	C.P.
Oxygen	< 2 ppm	< 25 ppm	< 50 ppm
Moisture	< 5 ppm	< 5 ppm*	< 5 ppm*
Nitrogen	< 50 ppm*	< 75 ppm*	< 150 ppm*
Methane	< 1 ppm*	< 100 ppm	< 250 ppm
Purity	> 99.9%	> 99.5%	> 99.0%

Liquid Phase

* Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Research	6031-LB	LB	0.3 (0.14)	137 (945)	4 (1.8)
Instrument	6032-44	44	38 (17.2)	137 (945)	171 (77.5)
	6032-420LB	1000	420 (190)	137 (945)	735 (333)
C.P.	6030-110	110	95 (43.1)	137 (945)	169 (76.6)
	6030-44	44	38 (17.2)	137 (945)	171 (77.5)

Safety Information

Flammable Gas

Flammability Limits in Air

Lower: 2.4%

Upper: 11.0%

Application Notes

Propylene is commonly used as a starting material for many petrochemicals and plastics.

Note: Instrument Grade is equivalent to Polymer Grade.

Recommended Equipment

CGA Valve 510

Pressure Regulator

Single-Stage Brass

ALA-202

Shipping Information

UN Number 1077

Hazard Class 2.1

DOT Name Propylene

DOT Label Flammable Gas

CAS Number 115-07-1

Sulfur Dioxide (SO₂)

Synonyms: Sulfurous Oxide

Molecular Weight: 64.06

MSDS Index: 20156

Product Specifications

	Anhydrous
Purity	> 99.98%

Liquid Phase

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Anhydrous	6111-55	55	150 (68)	34 (234)	210 (95)

Note: This product is not stocked at most locations and is available only on special order.

Safety Information

Poison gas that is also corrosive. Avoid inhalation or contact with skin.

Application Notes

Sulfur Dioxide is commonly used for food and beverage preservation and glass processing.

Recommended Equipment

CGA Valve 660

Pressure Regulator

Single-Stage SS

ALA-422

Shipping Information

UN Number 1079

Hazard Class 2.3

DOT Name Sulfur Dioxide Liquid

DOT Label Poison Gas, Corrosive

CAS Number 7446-09-5

Sulfur Hexafluoride (SF₆)

Synonyms: Sulfur Fluoride

Molecular Weight: 146.05

MSDS Index: 20153

Product Specifications

	Instrument	C. P.
Oxygen	< 50 ppm	< 80 ppm
Moisture	< 1 ppm	< 5 ppm
Nitrogen	< 200 ppm*	< 320 ppm*
Purity	> 99.99%	> 99.8%

Liquid Phase

*Denotes Typical Property

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	lbs. (kg)	PSIG (kPa)	lbs. (kg)
Instrument	6206-44	44	115 (52.2)	310 (2137)	248 (112.7)
	6206-16	16	40 (18.2)	310 (2137)	103 (46.8)
C. P.	6196-44	44	115 (52.2)	310 (2137)	248 (112.7)
	6196-16	16	40 (18.2)	310 (2137)	103 (46.8)

Safety Information

Inert gas that does not support life.

Contact with extreme heat can cause dangerous decomposition products.

Application Notes

Sulfur Hexafluoride is commonly used as an electrical insulating material in switchgear.

Both C. P. Grade and Instrument Grade products meet IES Specifications for electrical use.

Recommended Equipment

CGA Valve 590
Pressure Regulator
Two-Stage Brass
Alphagaz 1000 Series

Shipping Information

UN Number 1080
Hazard Class 2.2
DOT Name Sulfur Hexafluoride
DOT Label Nonflammable Gas
CAS Number 2551-62-4

Xenon (Xe)

Synonyms: NA

Molecular Weight: 131.3

MSDS Index: 20173

Product Specifications

	Rsearch Plus	Research
Oxygen	< 1 ppm	< 2 ppm
Moisture	< 1 ppm	< 3 ppm
Total Hydrocarbons	< 1 ppm	< 2 ppm
Carbon Dioxide	< 1 ppm	
Nitrogen	< 2 ppm*	< 10 ppm*
Hydrogen	< 1 ppm*	< 2 ppm*
Krypton	< 5 ppm*	< 25 ppm*
Neon	< 1 ppm*	< 1 ppm*
Argon	< 1 ppm*	< 1 ppm*
Purity	> 99.999%	> 99.995%

*Denotes Typical Properties

Packaging Information

	Product	Cylinder	Contents	Pressure	Weight
Grade	Code	Size	ft ³ (Ltr)	PSIG (kPa)	lbs. (kg)
Research Plus	6385-44	44	265 (7500)	853 (5881)	225 (103)
	6385-30AL	30AL	177 (5000)	853 (5881)	110 (50)
	6385-1 (100L)	1	3.5 (100)	795 (5482)	7 (3.2)
Research	6384-49	49	300 (8500)	853 (5881)	248 (112)
	6384-44	44	265 (7500)	853 (5881)	225 (103)
	6384-30AL	30AL	177 (5000)	853 (5881)	110 (50)

Safety Information

Inert gas which does not support life.

Application Notes

Xenon is used for electrical lighting and in satellites for ion propulsion. Xenon can also be used as an anesthesia gas.

Recommended Equipment

CGA Valve 580

Pressure Regulator

Two-Stage Brass

Alphagaz 1000 Series

Shipping Information

UN Number

2036

Hazard Class

2.2

DOT Name

Xenon, Compressed

DOT Label

Nonflammable Gas

CAS Number

7440-63-3