

A leading gas distributor since 1947.

WE WORK FOR YOU."

HIGH PURITY HYDROCARBONS SPECIALTY MIXES CRYO GRSES







A leading gas distributor since 1947.

Consistently delivering high purity gases and hydrocarbons that satisfy a wide array of specialized applications and industries.

HIGH PLIRITY

HYDROCARBONS SPECIALTY MIXES CRYO

GASES

ABOUT US

We offer a consistent, reliable supply of high purity hydrocarbons and gases, and services and products that optimize performance.

This incudes technical consultation with our in-house experts; specialized, supportive equipment; and turnkey, no-hassle logistics and delivery. Backed by a certified lab and safe, reliable packaging options—all aimed at exceeding your business needs and expectations.

OUR OFFERINGS



HIGH PURITY GASES



CERTIFIED LAB& COMPLIANCE



TECHNICAL EXPERTISE



TURNKEY, NO-HASSLE LOGISTICS



SUPPORTIVE EQUIPMENT & SERVICES

PACKAGING

We offer packaging options to fit a wide variety of needs. DOT approved. ISO certified. Stocked on site. Available in low and high pressure, cylinders and gas packing.

SERVICES

Cylinder inspection, certifications, painting, valving and safety reliefs.

VOENTRAL	120							-	717	UST	RΥ	CHA	RT	224
CENTRAL Mc GOWAN			×		(0.0)	0	M		0	R	29			4 III
	AG	AUTO	СНЕМ	FOOD &	MFG	MEDICAL	METAL	ОЕМ	PETRO	PHARMA	R&D	SEMI-	TRANSPORT	UTILITIES
Apatulana				BEV			METAL			PHARMA		CONDUCTOR		UTILITIES
Acetylene Air, Synthetic	Х	X X	х	Х	X	X X	x	X	Х	x	X	X	X	x
Aminomethane	х		х	х	х				х	х	х		х	
Ammonia	X	X	х	X	X	.,	X	X	Х	X	X	X	X	X
Argon Arsine	Х	х		Х	х	х	Х	Х		X	X	X X	X	
Boron trichloride			х		х		х	2	х	x	x	x		
Boron trifluoride			х				х		х	x	х	х	х	
Bromoethene Bromomethane	X		X X	X X	x		Х		X X	X	X			
1,3-Butadiene			X	Α					X	^	X			
n-Butane		х	х		х			х	х		X		х	х
iso-Butane	X	х	х	X	х		Х	х	х		Х		х	x
1-Butene cis-2-Butene			X X						X X		X			
iso-Butene			x						x		x			
trans-2-Butene			х					- 4	х		х			
1-Butyne	~		X		~	~	v		v		X		v	
Carbon dioxide Carbon monoxide	X X	X X	X X	X	X X	X X	X X	X	X X	X	X	X X	X X	X
Carbon oxyfluoride	^	^	X	^			^		^		x	_ ^		
Carbonyl sulphide	X	х	х	Х						х	х		х	х
Chlorine Chlorodifluoroethane			Х		X		Х		Х		X	х		X
Chlorodifluoroethane Chlorodifluoromethane			х		x				х		X			
Chloroethane			x		x	х			x		x	х		
Chloroethene			х		х						х			х
Chloromethane			X		X	х	Х		Х	X	X			
Chloropentafluoro - Chloropentafluoroethane			Х		х						X	x		
Cyanic chloride			х								x			
Cyclopropane			х			х			х		х			
Deuterium Diborane			X		X	Х					X	X		X
Dichlorodifluoro -	х		Х	х	X		Х		х		X	X		x
1,2-Dichlorodifluoro -											х			х
Dichlorofluoromethane			х		х						х			
Dichlorosilane 1,2-Dichlorotetrafluoro -			Х		х						X	X X		
1,1-Difluoroethane			х		x				х		X	_^		
1,1-Difluoroethene			х						х		х			
Difluoromethane			.,		X						X	X		
Dimethylamine 2,2-Dimethylpropane	Х		X X	Х	х		Х		X X	X	X			
Epoxyethane	х	х	х	Х	х	х			х	х	х		х	
Ethanamine			Х						X	x	X			
Ethane Ethanedinitrile	х	Х	X X	х	x		Х		Х		X	X	X	
Ethylene	x	х	x	X	x	х			x		x		х	х
Ethyl formate	х		х	Х	х					х	х			
Fluorine		Х	Х		X		Х		х		X	X	х	
Fluoromethane Helium		х			x	х	х	х			x	X X	x	х
Hexafluoroethane			х		X				х		х	X		x
Hydrogen	х		х	Х	х		Х	х	х	x	Х	х		x
Hydrogen bromide Hydrogen chloride			X X		X		~		X X	X X	X	X X		
Hydrogen chloride Hydrogen cyanide	х		X	х	X		Х	х	Α	X	X	_ ^		
Hydrogen fluoride	х		х	X	х		х		х		х	х		
Hydrogen iodide			Х								X	X		
Hydrogen sulphide Krypton			Х		X X	х	Х	х	Х	X	X	X X		X
Methane	х	х	х	х	X	^	х	X	х	х	X		х	х
Methanethiol	Х		х	х	х				х	х	х			
Methoxyethene Methoxymethane			X X		X X			\vdash	X X	x	X			
Metnoxymethane Natural gas		х	X		X				X		X		х	
Neon			~		х	х		х			x	х	-	
Nitric oxide		х	X			X		Х	X		х	X	х	X
Nitrogen Nitrogen dioxide	Х	х	X X	Х	х	х	Х	x	Х	X	X	X	x	X X
Nitrogen aloxiae Nitrogen trifluoride		X	X		х		х				X	x		
Nitrous oxide	х	х	x	х	х	х		х		х	х	х	х	х
Octafluoropropane					X	X					X	X		X
Oxygen Phosgene	Х	х	X X	Х	x	х	Х	Х	X X	X	x	X	X	X
Phospene Phosphine	х		X	х	X				^		X	x		
Propadiene			х						х	х	х			
Propane	X	X	X	X	X	х	X	х	X	X	X		X	X
Propylene Propyne		х	X X		х		Х		Х	X	X	X	X	X
Silane			^		х						X	х		
Silicon tetrachloride			х		X		х				х	x		
Silicon tetrafluoride			Х				X				Х	x		X
Sulphur dioxide Sulphur hexafluoride	Х	X	X X	Х	X	х	X X	х	Х	X	X	x	X	X
Tetrafluoroethane		^			X	^		^	х		X	_ ^	^	^
Tetrafluoromethane			х		x					х	х	х		
Trichlorosilane			х								Х	X		
Trifluoromethane Trimethylamine			v		Х	~			v	v	X	X		
i i i i i i i i i i i i i i i i i i i		х	X X		х	X X		х	Х	X	X	x	x	



INDUSTRIES SERVED

Following are the 14 most typical industries which use specialty gases in daily operations, and some basic definitions. They are represented by icons for easy reference. Applications for gases are not limited to those shown here.



AGRICULTURE (AG)

Farming, Production, Processing, etc.



AUTOMOTIVE (AUTO)

Excluding Transportation & OEM



CHEMICAL (CHEM)

Excluding Petrochemical and Pharmaceutical



FOOD & BEVERAGE (FOOD & BEV)

Processing, Distribution, Storage, etc.



MANUFACTURING (MFG)

Excluding Automotive and OEM



MEDICAL

Hospitals, Clinics and Health Care



METAL

Fabrication, Steel Making, etc.



OEM

Original Equipment Manufacturers



PETRO

Petrochemical Industries

(PHARMA)



PHARMACEUTICAL PHARMACEUTICAL

Fluid Extraction, Natural Products Chemistry, etc.



Products Chemistry, etc.

RESEARCH & DEVELOPMENT (R&D)
Institutions and Universities



SEMI-CONDUCTOR INDUSTRIES

Technology Related



TRANSPORT

Trucking, Logistics, etc.



UTILITIES

Energy, Electric, Gas and Water

See next page for more information about our specific specialty gas offerings.





SPECIALTY GAS PRODUCTS



PRODUCT CODES

Our product codes are designed for easy identification of the gases you need.

Specialty Gas: Argon 90% / Methane 10% / Size K



PACKAGE OPTIONS



Low-Pressure Cylinders

- · Free of any residual oil or particulates
- Available in a variety of sizes for both liquid and vapor withdrawal applications

High-Pressure Cylinders

- No shipping limitations
- Available in a variety of sizes, including
 3K, 4K & 6K psi cylinders and high-pressure gas packs



CUSDOT

All equipped with proper CGA valves to prevent contamination during vacuum/fill procedures, refillable and DOT compliant.

In stock and ready to fill and deliver.

WE WORK FOR YOU.

OUR LAB & DISTRIBUTION AREA

Our state-of-the-art lab is in Central Minnesota, with the capability of producing and delivering almost any gas mix you need.

We have locations across
Minnesota and Fargo.
Our large bulk fleet and route
trucks make daily stops and
deliveries. And we provide
365/24/7 emergency support.





SPECIALTY GAS REFERENCE CHARTS

GAS NAME	ABBREVIATION
Aviation Oxygen	ABO
Carbon Dioxide	CO2
Carbon Monoxide	CO
Compressed Air	C/A
Helium	HEL
Hydrogen	HYD
Liquid Nitrogen	LN2
Methane	CH4
Neon	NE
Nitric Oxide	NO
Nitrogen	NIT
Nitrous Oxide	N2O
Oxygen	OXY
Xenon	XEN

GAS GRADES	ABBREVIATION
Extra Dry	XD
High Purity	HP
National Formulary	NF
Prepurified	PP
Research Grade	RS
U.S. Pharmacopeia	USP
Ultra Grade Zero	UZD
Ultra High Purity	UHP
Zero Grade	ZG

GRADES	% PURITY
Research Grade	99.9999
Ultra High Purity (UHP)	99.999
Supercritical Fluid	99.998
High Purity (HP)	99.995
Laser	99.95
Anaerobic	99.95
Beverage	99.9
Food	99.9
Bone Dry	99.9
Medical	99.9



CLASSIFICATION / APPLICATION	ABBREVIATION
Aerobic	AE
Anaerobic	AN
Biological	BI
Blood Gas	BG
Environmental Protection Agency	EPA
Laser	LS
Lung Diffusion	LD

These reference charts provide general information about gas abbreviations, grades, purity, classifications and applications. For more information about our products (such as vessels, CGAs, etc.), ask to see a full product list.

> A CGA fitting is the standardized system for the attachment of a compressed gas cylinder to the required regulator or transfer line.

















WE WORK FOR YOU.

SPECIALTY GAS SALES

SPECGASSALES@CENTRALMCGOWAN.COM 800-569-1322 or 320-257-4800, OPT #6







