



CHEMIX SPECIALITY GASES
& EQUIPMENT

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Established in the year 2006, CHEMIX is one of the most dedicated firms engaged in manufacturing and supplying a wide range of Ultra High Purity Gases, Gas Mixtures, Calibration Gas Mixtures and Gas Handling Equipment. CHEMIX takes up turn-key-project as -‘one stop solution for all Special Gas needs’

OUR MISSION

- Supply of Right Specialty Gas Product On Time - Every Time
- Support customers technically for using the Right Product in the Right Fashion

QUALITY POLICY

- Understand customer requirements correctly and supply and support accordingly
- Maintain traceability records
- Build up customer data along with feedback information
- Assess the vendors
- Maintain safety and housekeeping

An ISO 9001 company CHEMIX adheres to ISO, ASTM & BIS guidelines for Manufacturing, Analysis & Certification as well continually improvising manufacturing processes. CHEMIX takes pride in understanding and delivering specific requirements of the customers for their Special Purpose Gases, Gas Pipelines & Control Systems. Products are accurately composed and traceability is maintained as per international standards. CHEMIX follows the guidelines as per Gas Cylinder Rule.



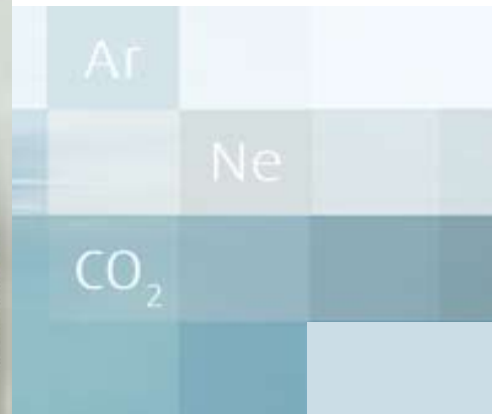


CHEMIX handles specific range of Ultra High Pure Gases to match the need of the niche market of critical applications. CHEMIX Pure Gases are guaranteed to be free of critical contaminants that can cause instrument interference and chromatographic column degradation.

CHEMIX Pure Gases listed below are available in various grades depending on specific impurity level and in different cylinder sizes. MSDS is furnished while supplying the product.

NAME	FORMULA	GRADES
Air		Zero, Synthetic, Synthetic HC free, Research Grade
Acetylene	C ₂ H ₂	3.0 (99.9 %), AAS, Instrument
Ammonia	NH ₃	2.5 (99.5 %), 3.0 (99.9 %), 5.0 (99.999%)
Argon	Ar	Zero, 5.0 (99.999%), 5.5 (99.9995%), 5.8 (99.9995%), Research Grade.
Carbon Monoxide	CO	2.5 (99.5%), 3.0 (99.9%), 3.7 (99.97%), 4.5 (99.995%).
Carbon Dioxide	CO ₂	3.0 (99.9%), 4.0 (99.99%), 4.5 (99.995%), 5.0 (99.999%).
Ethane	C ₂ H ₆	2.0 (99%), 3.0 (99.9%).
Ethylene	C ₂ H ₄	2.5 (99.5%), 3.5 (99.95%)
Helium	He	4.5(99.995%), 4.7(99.997%), 5.0 (99.999%), 5.5 (99.9995%), 6.0 (99.9999%), Research Grade.
Hydrogen	H ₂	Zero, 4.0(99.99%), 5.0 (99.999%), 5.5(99.9995%), 6.0 (99.9999%), Research Grade.
Hydrogen Sulphide	H ₂ S	2.5 (99.5%).
1 Butene	1C ₄ H ₈	2.5 (99.5%).
Iso Butane	I C ₄ H ₁₀	2.5 (99.5%).
Iso Butylene	I C ₃ H ₈	2.5 (99.5%).
Krypton	Kr	5.0 (99.999%).
Methane	CH ₄	2.5 (99.5%), 3.5(99.95%), 4.5(99.995%), 5.0(99.999%).
N-Butane	C ₄ H ₁₀	2.5 (99.5%).
Nitric Oxide	NO	2.5 (99.5%).
Nitrogen	N ₂	Zero, 4.0(99.99%), 5.0 (99.999%), 5.5 (99.9995%), 6.0 (99.9999%), Research Grade.
Nitrous Oxide	N ₂ O	2.5 (99.5%).
Neon	Ne	5.0 (99.999%).
Oxygen	O ₂	2.5 (99.5%), 5.0 (99.999%), Research Grade.
Propane	C ₃ H ₈	2.5 (99.5%).
Propylene	CEH ₆	2.5 (99.5%).
Sulphur Dioxide	SO ₂	2.5 (99.5%), 3.0 (99.9%), 3.8 (99.98%)
Sulphur Hexa Flouride	SF ₆	3.0 (99.9%), 3.8 (99.98%), 4.0 (99.99%).
Xenon	Xe	5.0 (99.999%).

DETECTOR	DETECTOR IN IMPURITIES AFFECTING SPECIFIC DETECTORS	RECOMMENDED CHEMIX PURE GRADE GASES
Detector	Typical impurities affecting specific Detectors	Recommended Grade
Discharged Ionization Detector (DID) Helium Ionization Detector (HID)	Atmospheric contaminants in the Helium carrier gas can cause baseline noise, signal polarity and reduced detector sensitivity and stability	Helium (5.8, 5.5)
Electron Capture Detector (ECD)	Oxygen & Moisture contaminants can reduce detector response & Halocarbons can rise baseline noise and negative peaks	Nitrogen (Grade 5.5, HC-free) Methane + Argon
Electrolytic Conductivity Detector (ELCD)	To minimize baseline noise and analytical inaccuracies, special grade gases are specifically manufactured for use with Electrolytic Conductivity Detector	Helium & Hydrogen (5.0, 5.5) , Air (5.0)
Flame Ionization Detector (FID)	Hydrocarbons in carrier & fuel gases can cause baseline noise and reduced detector sensitivity. Oxygen & Moisture contaminants can cause column deterioration	Helium (5.5, 5.0) Hydrogen (5.5,5.0) Nitrogen & Air (5.0)
Flame Photometric Detector (FID)	Carbon dioxide can suppress detector response & organics can yield baseline noise	Helium , Nitrogen & Hydrogen (5.8, 5.5) Air (5.0)
Halogen Specific Detector (XSD)	Detector performance is affected by several factors including source OF Oxygen and gas flow rate	Oxygen & Air (5.0)
Mass Spectrometer (MS)	Any impurity coinciding with quantitated peak can cause analytic inaccuracies	Hydrogen , Argon Helium, Nitrogen (all 5.8, 5.5 Grade)
Photo Ionization Detector (PID)	Oxygen contaminants can cause suppressed detector response & Halocarbons can yield baseline noise	Helium (5.8, 5.5) Nitrogen (5.8,5.5)
Pulsed Discharge Electron Capture Detector (PDECD)	Specially manufactured Gas Mixtures offered by CHEMIX fine tunes the sensitivity of the detector and analytic response character	Nitrogen + Helium Methane + Helium Hydrogen + Helium Xenon + Helium
Pulsed Discharge Helium Ionization Detector (PDHID)	Specially certified Helium Ultra high pure and research grade fine tunes the sensitivity of the detector	Helium (5.8)
Pulsed Discharge Photo Ionization Detector (PDPID)	Specially manufactured Gas Mixtures offered by CHEMIX fine tunes the sensitivity of the detector and analytic response character	Argon + Helium Kripto + Helium Xenon + Helium
Pulsed Flame Photometric Detector (PFPD)	Atmospheric contaminants gen particularly Oxygen and Hydrocarbon interfere with the selectivity and sensitivity of the instrument	Nitrogen, Helium Hydrogen, Air (all 5.8, 5.5 Grade)
Thermal Conductivity Detector (TCD) Ultrasonic Detector (USD)	Atmospheric contaminants can oxidize detector filament and give rise to reduced sensitivity, base line noise and negative peak	Hydrogen, Helium, Nitrogen, Argon (all 5.0, 5.5 Grade)
Thermal Specific Detector (TSD)	Hydrocarbon and other contaminants can prevent the elution of trace components by absorbing into ceramic components of the detectors	Helium, Nitrogen & Hydrogen (5.0, 5.5) Air (5.0)



Whether you require a Process Gas Mixture or a High Accuracy Calibration Gas Mixture for an analytical application, you can be sure that CHEMIX has the capability and expertise to meet your needs. Here we present a list of pure gases which are our input ingredient. A wide range of customized gas mixtures can be supplied as required. Gas and liquid mixtures are manufactured within the limit of physics and chemistry from amongst the chemicals listed below.

LIST OF RAW MATERIALS TO MAKE GAS MIXTURES

Acetaldehyde	Cis-2-Butene	Ethyl Methyl Ether	LPG	Nitrogen	R134A
Acetone	Cis-2-Pentene	Ethylene	MEK	Nitrogen Dioxide	R600
Acetonitrile	ClO2	Fluorine	Methane	Nitrous Oxide	R744
Acetylene	Cyclo Butane	Formaldehyde	Methanol	Nonane	RH
Ammonia	Cyclo Hexane	HBr	Methyl Acetylene	NOX	Silane
Argon	Cyclo Pentane	HCFC	Methyl Cyclo Hexane	Oxygen	Sulfur Dioxide
Arsine	Cyclo Propane	HCL	Methyl Pentane	1-Octene	Sulfur Hexafluoride
BF3	Deuterium	Helium	Methyl-Cyclo-Pentane	2-Octene	Ter-Butyl Methyl Ether
Benzene	Diborane	HF	Moisture	n-Octane	Toluene
1,2 Butadiene	n-Decane	Hydrogen	1-Methyl-2-Pyrrolidinone	PH3	Trans-2-Butene
1,3 Butadiene	Di Ethyle Ether(DEE)	Hydrogen Sulphide	2-Methyl -1-Butene	Propane	Trans-2-Pentene
1-Butene	Di Methyl Ether(DME)	1-Hexene	2-Methyl Butane	Propylene	Trimethylamine
n-Butane	Dimethylamine	n-Heptane	2-Methyl-1-Pentene	Propyne	Vinyl Acetylene
1-Butyne	Ethane	n-Hexane	2-Methyl-2-Butene	n-Pentane	Xenon
Carbon Dioxide	Ethanol	Iso butane	3-Methyl Pentane	1,2-Propadiene	Xylene
Carbon Disulfide	Ethylene Oxide	Iso butylene	3-Methyl-1-Butene	1,3 Propadiene	m-Xylene
Carbon Monoxide	Ethyl Acetate	Iso Hexane	Neo Pentane	1-Pentene	o-Xylene
Carbonil Sulfide	Ethyl Acetylene	Iso Pentane	Neon	2-Pentene	p-Xylene
Chlorine	Ethyl Benzene	Krypton	Nitric Oxide	R1270	Zero Air

*We request users to discuss with us their specific needs (even if requirement is not mentioned in above list).
MSDS is furnished on request*



Calibration Gas Mixture- more emphatically a degree of measurement- is our prime product. Gravimetric filling method as per ISO 6142 where the components are added sequentially using traceable weights and improvised manometer method as per ISO 6146 are followed. For analysis, various GC methods and direct analysis methods as per IS, ISO and ASTM standards are used in the laboratory. Laboratory is maintained as per ISO 17025 (NABL). For certification, ISO 6141-2015 is being followed.

MIXTURES TRACEABILITY

All our Calibration Mixtures are delivered with a calibration certificate compliant to ISO 6141. Due to our thorough approach to quality; we are able to trace every mixture back to its original filling data. This data includes identification of cylinders, production process, actual component weights and chromatographic analysis results. Measuring devices like weighing scales and pressure gauges are calibrated against traceable weights and certified master gauges respectively on a regular interval. Furthermore the gas compositions are analyzed traceable to NIST or NPL references.

PREPARATION TOLERANCE & CERTIFICATION ACCURACY

Preparation Tolerance defines the maximum permitted variation between the requested nominal concentration and the actual concentration supplied. The Certification Accuracy defines the accuracy of the instruments used and method followed for analysis and certification. Standard uncertainty also calculated as and when required..

PRESSURE

Final pressure of the supplied gas depends on the vapor pressure of the component and its concentrations. We supply at maximum pressure permissible for the particular composition of gases in a given container.

STABILITY

We guarantee the homogeneity of the gas mixtures stable during the particular period of time. Selection of right cylinder and cylinder preparation followed rigorously to achieve stability.

MSDS for all the gases are available and furnished on request while supplying the product.

2-COMPONENT CALIBRATION GAS MIXTURES

Our Product List Contains 284 Compositions of 2-Component Gas Mixtures. Few Examples Listed Below

ACETALDEHYDE		CARBON DIOXIDE	
• 100 ppb -1000 ppb + Nitrogen	CGM02924710	• 1ppm-999ppm + Air	CGM02116810
• 0.1ppm -10 ppm + Nitrogen	CGM02924720	• 0.1% -30% + Air	CGM02116820
ACETYLENE		• 1ppm-999 ppm + Argon	CGM02110410
• 1ppm-50 ppm + Helium	CGM02022510	• 0.1% -30 % + Argon	CGM02110420
• 0.1% -1 % + Helium	CGM02022520	• 1ppm-999 ppm +Nitrogen	CGM02114710
• 0.1%-1.0%+Nitrogen	CGM02024710	• 0.1% - 30 % +Nitrogen	CGM02114720
AMMONIA		CARBON MONOXIDE	
• 50ppm-999 ppm + Argon	CGM02030410	• 1ppm - 50 ppm + Air	CGM02126810
• 0.1%-3.0% + Argon	CGM02030420	• 1.1%-6 % + Air (LEL MIX)	CGM02126820
• 1ppm-999 ppm + Nitrogen	CGM02034710	• 1ppm-999 ppm + Helium	CGM02122510
• 1000 ppm-1.0%+Nitrogen	CGM02034720	• 1ppm-999 ppm + Argon	CGM02120410
• 1%-10 % + Nitrogen	CGM02034730	• 1%-50%+Argon	CGM02120420
ARGON		CHLORINE	
• 50ppm-999 ppm + Helium	CGM02042510	• 1ppm-50ppm+Nitrogen	CGM02834710
• 0.1%-50%+Helium	CGM02042520	• 50ppm-1000ppm + Nitrogen	CGM02834720
• 50ppm-999 ppm + Hydrogen	CGM02042910	ETHANE	
• 0.1%-49 % + Hydrogen	CGM02042920	• 1ppm-999 ppm + Air	CGM02196810
• 50ppm-999 ppm + Nitrogen	CGM02044710	• 0.1%-1.5%+Air (LEL MIX)	CGM02196820
• 0.1%-49% + Nitrogen	CGM02044720	• 1ppm-999 ppm + Nitrogen	CGM02194710
BENZENE		• 15%+Nitrogen	CGM02194720
• 10ppb-1000 ppb + Air	CGM02056810	ETHYLENE	
• 1000 ppb - 10 ppm+ Air	CGM02056820	• 1ppm-999ppm+Air	CGM02236810
• 10ppm-500 ppm + Nitrogen	CGM02054710	• 0.1%-1%+Air (LEL MIX)	CGM02236820
n - BUTANE		• 1ppm-999ppm+Nitrogen	CGM02234710
• 1ppm-49 ppm + Air	CGM02086810	• 1%-20%+Nitrogen	CGM02234720
• 50 ppm - 0.9 % + Air	CGM02086820	HELIUM	
• 1ppm-49 ppm+ Nitrogen	CGM02084710	• 10%-50% + Air	CGM02256810
• 1%-5%+Helium	CGM02082510	• 10ppm-999 ppm + Argon	CGM02250410
• 5%-65% + Propane	CGM02085910	• 0.1%-50% + Argon	CGM02250420
iso BUTANE		• 1ppm-999 ppm + Nitrogen	CGM02254710
• 1ppm-999 ppm + Helium	CGM02312510	• 0.1%-50% + Nitrogen	CGM02254720
• 5%-45 % + Propane	CGM02315910	• 5%-15% + Oxygen	CGM02255410
• 1ppm-999 ppm + Nitrogen	CGM02314710	n - HEXANE	
• 1%-5.0 % + Nitrogen	CGM02314720	• 1ppm-5000 ppm + Air	CGM02276810

2-COMPONENT CALIBRATION GAS MIXTURES *continued*

Our Product List Contains 284 Different Compositions Of 2-Component Gas Mixtures. Few Examples Listed Below

HYDROGEN		• 0.1%-49%+Oxygen	CGM02475420
• 5ppm-999 ppm + Air	CGM02296810	• 1.0%-95% + Helium	CGM02472510
• 0.1%-2% + Air (LEL MIX)	CGM02296820	NITROGEN DIOXIDE	
• 1.0%-10%+Argon	CGM02290410	1ppm to 50 ppm + Nitrogen	CGM02484710
• 0.1%-40%+Helium	CGM02292510	5ppm to 100ppm +Air	CGM02486810
• 0.1%-5.0%+CO2	CGM02291110	NITROUS OXIDE	
• 5ppm-999 ppm + Nitrogen	CGM02294710	• 5ppm-999 ppm + Air	CGM02496810
• 0.1%-49%+Nitrogen	CGM02294720	• 0.1%-10%+Air	CGM02496820
• 0.1%-2.0%+Oxygen (LEL MIX)	CGM02295410	• 5ppm-999ppm + Nitrogen	CGM02494710
HYDROGEN CHLORIDE		• 0.1%-10% + Nitrogen	CGM02494720
• 2.0ppm – 10000ppm +Nitrogen	CGM02874710	OXYGEN	
HYDROGEN SULPHIDE		• 1ppm-999 ppm + Argon	CGM02540410
• 1ppm-1000 ppm + Nitrogen	CGM02304710	• 0.1%-49% + Argon	CGM02540420
• 5ppm- 500 ppm+ Hydrogen	CGM02304720	• 1ppm-999 ppm + Helium	CGM02542510
• 1%-10%+Hydrogen	CGM02302910	• 0.1%-49% + Helium	CGM02542520
METHANE		• 1ppm-999 ppm + Nitrogen	CGM02544710
• 5ppm-999 ppm + Air	CGM02366810	• 0.1%-49% + Nitrogen	CGM02544720
• 0.1%-2.5% + Air (LEL MIX)	CGM02366820	• 60%-80% + Nitrogen	CGM02544730
• 5ppm-999 ppm + Argon	CGM02360410	PROPYLENE	
• 0.1%-49% + Argon	CGM02360420	• 1ppm-999 ppm + Air	CGM02606810
• 5ppm-999 ppm + Hydrogen	CGM02362910	• 0.1%– 1.2% + Air (LEL MIX)	CGM02606820
• 0.1%-49% + Hydrogen	CGM02362920	• 1ppm-999 ppm + Helium	CGM02602510
• 10%-50% + Neon	CGM02364410	• 1ppm-999 ppm + Nitrogen	CGM02604710
• 50%-95% + Nitrogen	CGM02364710	• 0.1%-3%+Nitrogen	CGM02604720
NITRIC OXIDE		• 5%-10%+ Nitrogen	CGM02604730
• 1%-10% + Helium	CGM02462510	SULPHUR DIOXIDE	
• 50ppm-1000 ppm + Nitrogen	CGM02464710	5ppm-20 ppm + Nitrogen	CGM02614710
• 5ppm-999 ppm + Nitrogen	CGM02464720	100ppm-999 ppm + Nitrogen	CGM02614720
• 0.1% + Nitrogen	CGM02464730	0.1%-12 % + Nitrogen	CGM02614730
NITROGEN		SULPHUR HEXAFLUORIDE	
• 100ppm-999 ppm + Argon	CGM02470410	• 5ppm- 999 ppm + Air	CGM02626810
• 0.1%-49% + Argon	CGM02470420	• 0.1%-5% + Air	CGM02626820
• 10ppm – 999 ppm + Helium	CGM02472510	• 51ppm-999 ppm + Nitrogen	CGM02624710
• 0.1%-49% + Helium	CGM02472520	• 0.1%-5.0% + Nitrogen	CGM02624720
• 5ppm-999 ppm + Hydrogen	CGM02472910	TOLUENE	
• 0.1%-49% + Hydrogen	CGM02472920	• 1ppm-100 ppm + Air	CGM02646810
• 100ppm-999 ppm + Oxygen	CGM02475410	• 5ppm-50 ppm + Nitrogen	CGM02644710

3-COMPONENT CALIBRATION GAS MIXTURES

Our Product List Contains 85 Compositions of 3-Component Gas Mixtures. Few Examples Listed Below

Benzene 50ppb + Acetaldehyde 500 ppb + Nitrogen Balance	CGM03054710
Diethyl Ether (C ₄ H ₁₀ O) 3% + Biogas (CO ₂ + CH ₄) Balance	CGM03188810
Formaldehyde 0.5% - 1.0% + Ethane 1.0% + Nitrogen Balance	CGM03714710
Methane 1.0% + Sulphur Hexafluoride 12.0% + Nitrogen Balance	CGM03364710
Nitric Oxide 50-75 ppm + Nitrogen Dioxide 75-10ppm + Nitrogen Balance	CGM03484710
Nox 1662 ppm + Sulphur Dioxide 3982ppm + Nitrogen Balance	CGM03784710
Propane 1ppm + Methane 10ppm + Nitrogen Balance	CGM03594710

4-COMPONENT CALIBRATION GAS MIXTURES

Our Product List Contains 45 Compositions of 4-Component Gas Mixtures. Few Examples Listed Below

• Carbon Monoxide 50ppm + Oxygen 20.9 % + RH 50% + Nitrogen Balance	CGM04124710
• Carbon monoxide 500ppm + Carbon dioxide 500ppm + Methane 500ppm + Nitrogen Balance	CGM04124720
• Carbon monoxide 1.0 % + Carbon Dioxide 1.0 % + Methane 1.0 % + Nitrogen Balance	CGM04124730
• Hydrogen Sulphide 0.01 - 3.0% + Carbon Dioxide 15 - 30% + Methane 60 - 65% + Hydrogen Balance	CGM04303610
• Methane 2.0% + Hydrogen 8.0% + Carbon Monoxide 32.0% + Nitrogen Balance	CGM04364710
• Methane 60-65% + Carbon dioxide 15-25% + H ₂ S 0.01- 0.5% + Hydrogen Balance	CGM04303610
• Nitrogen Dioxide 100 - 1000ppb + Carbon Dioxide 380ppm + Oxygen 20.0% + Nitrogen Balance	CGM04114710
• Nitrogen Dioxide 6.0ppm + Methane 15ppm + Carbon Dioxide 2000ppm + Nitrogen Balance	CGM04484710
• Oxygen 0.75% + Carbon monoxide 950ppm + Carbon dioxide 4% + Nitrogen Balance	CGM04124710
• Nitric Oxide 500ppm + Sulphur Dioxide 500ppm + Carbon monoxide 500ppm + Nitrogen Balance	CGM04464710

MULTI-COMPONENT CALIBRATION GAS MIXTURES

Our Product List Contains 39 Compositions of Multi -Component Gas Mixtures. Few Examples Listed Below

• n- Butane 5.0% + n-pentane 5.0% + cis-2-butene 10.0%+ Propane 10.0% + trans-2-Butene 10.0%+iso-Butane 15.0%+isobutylene 5.0% +Propylene Balance	CGM08086010
• Hexane 0.100%+n-Pentane 0.150%+iso-pentane 0.150% +neo-Pentane 0.150%+n-Butane 0.300%+iso-Butane 0.300%+Propane 1.000% +Carbon Dioxide 1.000%+Ethane+Nitrogen 2.500%+Methane 4.000%	CGM03273610
•Ethane 1.0ppm + Ethylene 1.0ppm+Propane 1.0ppm+Propylene1.0ppm +N-Butane 1.0ppm+1-Butene 1.0ppm+Cis 2 Butane 1.0ppm + Trans 2 Butane 1.0ppm +1,3-1.0ppm+Benzene 1.0ppm+Toluene-1.0ppm+Nitrogen-Balance-1.0ppm +N-Hexane 1.0ppm+iso Butane 1.0ppm+N Heptane-1.0ppm +iso-Butylene 1.0ppm+N-Pentane 1.0ppm+iso Pentane Butadiene	CGM16194710



Our range of special application gases are used widely for analysis, process control etc. We provide consistent and dependable quality to empower customers to operate efficiently in a global economy. These gases are available in a wide selection of containers as well as different compositions. Few examples are given below.

ENVIRONMENTAL MONITORING

AIR MONITORING/AUTOMOTIVE/STACK EMISSION/POLLUTION CONTROL

• Carbon dioxide ppm/% in Air/ N ₂ -	CGM02114710
• Carbon Monoxide ppm/% in Air/ N ₂ -	CGM02124710
• Hydrogen Sulphide ppm/% in Air/ N ₂ -	CGM02304710
• Methane ppm/% in Air/ N ₂ -	CGM02364710
• NO ₂ ppm/% in Air/ N ₂ -	CGM02464710
• Oxygen ppm/% in N ₂ -	CGM02594710
• Propane ppm/% in Air-	CGM02594710
• Sulphur Dioxide ppm/% in N ₂ -	CGM02614710
• CO ₂ -6-13% + CO-1-8% + Propane 300 - 3000 ppm + N ₂ Balance-	CGM04594710

MEDICAL GASES

CLINICAL BLOOD GAS MIXTURE

• CO ₂ 0.5-12.0% + Nitrogen Balance	CGM02114720
• CO ₂ 3.0-12.0 % + Oxygen Balance	CGM02125410
• CO ₂ 3-12 % + O ₂ 5-23% + Nitrogen Balance	CGM03114710

PULMONARY FUNCTION TESTING /LUNG DIFFUSION GAS MIXTURE (DLCO)

• CO 900-1000ppm + O ₂ 21 % + Nitrogen Balance	CGM03124710
• CO 0.3% + He 10% + O ₂ 21% + Nitrogen Balance	CGM04124710
• CO 0.4% + Ne 0.5% + C ₂ H ₂ 0.5% + O ₂ 21 % + Nitrogen Balance	CGM05124710
• CO 1000ppm + CO ₂ 200ppm + O ₂ 21% + Nitrogen Balance	CGM04124720
• CO 0.3% + CH ₄ 0.3% + O ₂ 21% + N ₂ Balance	CGM04364710
• CO 0.3% + CH ₄ 0.3% + O ₂ 21% + Ar 1% + Nitrogen Balance	CGM05364710
• CO 0.25% + He 18.5% + O ₂ 21% + Nitrogen Balance	CGM04124710

CALIBRATION SLOPE/SPAN GAS

• CO ₂ 2-12% + O ₂ 5-25% + Nitrogen Balance	CGM03114710
• CO ₂ 10% + Nitrogen Balance	CGM02114730

BIOLOGICAL GROWTH MIXTURE (ANAEROBIC & AEROBIC)

• Hydrogen 3% + CO ₂ 97%	CGM02291110
• CO ₂ 0.5-10% + Nitrogen Balance	CGM02114730
• CO ₂ 0.5-10% + H ₂ 0.5-10.0% + Nitrogen Balance	CGM03114710
• CO ₂ 0.5-10% + Oxygen Balance	CGM02115410
• CO ₂ 0.5-10% + Air Balance	CGM02116810

NEONATAL PEDIATRIC GASES

• NO 10-25ppm + Nitrogen Balance	CGM02464710
• NO 450-500ppm + Nitrogen Balance	CGM02464720
• NO 900-1000ppm + Nitrogen Balance	CGM02464730
• NO ₂ 9.5ppm + Nitrogen Balance	CG484702000
• NO ₂ 10ppm + Nitrogen Balance	CGM02484710
• NO ₂ 10-12.5ppm+Air Balance	CGM02486510

MEDICAL LASER MIXTURE

• CO ₂ 4.5-9% + N ₂ 13.5-15% + Helium Balance	CGM03112510
• CO ₂ 1-10% + CO 1-10% + N ₂ 1-10% + Helium Balance	CGM04112510

INSTRUMENTS GAS

• Helium - 99.995	CHGU25050
• Carbon dioxide - 99.97	CHGU11037

ENTONOX GAS MIXTURE

• Nitrous oxide 50% + Oxygen 50%	CGM02495410
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INSTRUMENT GAS MIXTURE
ELECTRON CAPTURE GAS MIXTURE

• P-10, (Methane 10% + Argon Balance)	CGM02360410
• P-5, (Methane 5% + Argon Balance)	CGM02360420
• Hydrogen 8.5% + Helium Balance	CGM02292510

FLAME IONIZATION FUEL MIXTURE

• Hydrogen 40% + Helium Balance	CGM02292510
• Hydrogen 40% + Nitrogen Balance	CGM02294710

NUCLEAR COUNTER MIXTURE

• P-10, (Methane 10% + Argon Balance)	CGM02360410
• P-5, (Methane 5% + Argon Balance)	CGM02360420
• Butane 1.3% + Helium Balance	CGM02082510
• Isobutene 0.95% + Helium Balance	CGM02312510
• Propane 1.5% + Helium Balance	CGM02595010

LEAK DETECTION MIXTURE

• Halocarbon12 0.5-3% + Nitrogen Balance	CGM02694710
• Helium 05-10% + Nitrogen Balance	CGM02254710

FRC TEST MIXTURE

• Ethane 3% + CO 18% + Methane 24% + Hydrogen Balance	CGM04192910
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FURNACE GAS MIXTURE

• Hydrogen 0.1-10%+ Nitrogen Balance	CGM02294710
• CO 60% + CO ₂ 40%	CGM02111210
• CO 1-5% + Nitrogen Balance	CGM02124710

SPARK CHAMBER GAS MIXTURE

• Helium 10-20% + neon Balance	CGM02254410
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AUTOMOBILE / VEHICLE EMISSION STANDARDS

• Propane 300-3000ppm + CO 1-8% + CO ₂ 6-12% + N ₂ Balance	CGM04594710
• Hexane 1600ppm + CO 8% + CO ₂ 13% + N ₂ Balance	CGM04274710
• NO 100-2000ppm + N ₂ Balance	CGM02464710
• CO 900-1000ppm + N ₂ Balance	CGM02124710
• Ammonia 10-500ppm + N ₂ Balance	CGM02034710
• CO 11-12%+N ₂ Balance	CGM02124710
• Methane 2000-2500ppm + Air Balance	CGM02366820
• Propane 150-3000ppm + Air Balance	CGM02596810
• Propylene 150ppm + Air Balance	CGM02606810
• Toluene 70ppm + Air Balance	CGM02646810
• CO ₂ 15-20% + N ₂ Balance	CGM02114740
• O ₂ 22-25%+N ₂	CGM02564730
• Hydrogen 40% + Helium Balance	CGM02292510

SPECIAL WELDING GAS SHIELD

• Argon 20% + Helium Balance	CGM02042510
• 2% to 30% CO ₂ + Argon	CGM02110420
• 2% to 10% Nitrogen + Argon	CGM02470420
• 2% to 10% Hydrogen + Argon	CGM02290420

LASER GAS MIXTURE

• CO ₂ 5% + N ₂ 13% to 55% + Helium Balance	CGM03112510
• CO 2-4% + CO ₂ 6-8% + N ₂ 6-8% + Helium Balance	CGM04122510
• H ₂ 4% + N ₂ 5% + CO ₂ 15% + Helium Balance	CGM04292510
• H ₂ 0.4 + CO 4% + CO ₂ 8% + N ₂ 8% + Helium Balance	CGM05292510
• Neon 8.3-20% + Helium Balance	CGM02442510

FRUIT RIPENING GASES

• Ethylene 99.5%	CGP02301001
• 5% Ethylene + N ₂ Balance	CGM02234710

FIRE EXTINGUISHER GAS MIXTURE

• IG 541 (CO ₂ 8% + Ar 40% + N ₂ 52%)	CGM03114750
• IG 55 / ARGONITE (Ar 50% + N ₂ 50%)	CGM02044710
• IG 100 (Nitrogen 99.999%)	CUP4702000

LIGHTING INDUSTRY GAS MIXTURE

• 10%, 50%, 75% Argon in Neon	CGM02044410
• 80%, 98% Argon in Hydrogen	CGM02042910
• Krypton 10% + Argon Balance	CGM02350410
• Argon 25% + Krypton Balance	CGM02043510
• Krypton 74% + Neon 25% + Argon Balance	CGM03043510

BIO GAS MIXTURE

• CO ₂ 35% to 50%+CH ₄ 65% to 50%	CGM02113610
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HYDROCARBON GAS MIXTURE

Our Product List Contains 115 Compositions of Hydrocarbon Gas Mixtures. Few Examples Listed Below

NATURAL GAS STANDARD

- Ethane 8.4-8.96% + C₃H₈ 5-6% + iso-Butane 0.9-1.3%
+ N-Butane 1-1.6% + N-Pentane 0.2-0.4% + N-Hexane 0.15-0.4%
+ CO₂ 1-2.3% + N₂ 0.2-0.5% + CH₄ Balance CGM09273610
- CO₂ 1% + O₂ 0.25% + N₂ 1.25% + CH₄ 85% + C₂H₆ 5.50% + C₃ 3% +
iC₄ 1% + nC₄ 1% + iC₅ 0.50% + nC₅ 0.50% + C₆ 1% CGM11344710

BTU GAS MIXTURE

- CH₄ 87.0-97.0%+C₂H₆1.5-7.0%+C₃H₈ 0.1-1.5%+ iC₄H₁₀ 0.01-.03% CGM04313610

LPG MIX REFERENCE

- Methane 0.5% + Ethane 0.5% + Ethylene 0.5% + Propane 30%
+ Propylene 4% + Propadiene 0.5% + n-butane 15% + 1-butene 5%
+ cis-2-butene 0.5% + trans-2-butene 0.75% + 1,2-butadiene 1.5%
+ 1,3-butadiene 1% + isobutylene 4% + n-pentane 1.25%
+ iso-pentane 2% + iso-Butane Balance CGM16363110

TRANSFORMER OIL DISSOLVED GAS STANDARD

- CH₄ 100-1000ppm + C₂H₆ 100-1000ppm + C₂H₄ 100-1000ppm + C₂H₂ 5000ppm
+ CO 5000ppm + CO₂ 50-5000ppm + N₂ 4000-20% + Ar Balance CGM08360410

REFINERY GAS STANDARD (RGA GAS MIXTURE)

- Methane 1.5% + Ethane 2.5% + Ethylene 2.5% + Propane 2.5%
+ Propylene 5% + Iso-butane 3% + n-butane 3% + 1-butene 3% + trans-2-butene 3%
+ H₂ 2% + CO₂ 1% + CO 1% + Iso-pentane 2% + n-pentane 2% + N₂ 60% CGM15114710
- H₂ 13% + CO₂ 3% + O₂ 1% + N₂ 36% + CO 1% + CH₄ 5% + C₂H₆ 4% + C₂H₄ 2%
+C₂H₂ 1% + C₃ 6% + C₃H₈ 3% + C₃H₆ 1% + iC₄ 5% + nC₄ 4% + 1-C₄H₈ 2%
+ iC₄H₈ 1% + t-2C₄H₈ 3% + c-2C₄H₈ 2% + 1,3-C₄H₆ 3% + iC₅ 1%
+ nC₅ 2% + C₅=C₆ 1% CGM22344710

PETROCHEMICALS REFERENCE GAS MIXTURE

- Propane 0.5% + Propylene 12.5% + Ethane 7% + Ethylene 32%
+ Methane 32% + H₂ 16% CGM06592310
- Propylene 95% + Propane 5% + Ethane 500ppm + Methyl Acetylene 25ppm
+ Propadiene 25ppm + Butane 500ppm + 1,3-Butadiene 50ppm + iso-Butane 50ppm
+ Acetylene 50ppm + isobutylene 100ppm + Pentane 50ppm CGM11556010
- Ethane 0.15% + Propane 2.15% + Propylene 0.7% + iso- Butane 22%
+ N-Butane 18% + 1-Butane 8.4% + l-Butylene 10.6%
+ T-2 Butene 9.6% + C-2- Butane 7.5% + 1,3-Butadiene 0.5%
+ iso Pentane 1% + Hexane 0.05% CGM12273110
- Ethylene 25% + 1-Butene 10% + Ethane 10% + Propylene 8% + Propane Balance CGM05095910
- Ethyl Acetylene 10ppm + Vinyl acetylene 10ppm + Methyl acetylene 10ppm
+ 1,2 Butadiene 10ppm + N₂ Balance CGM05824710

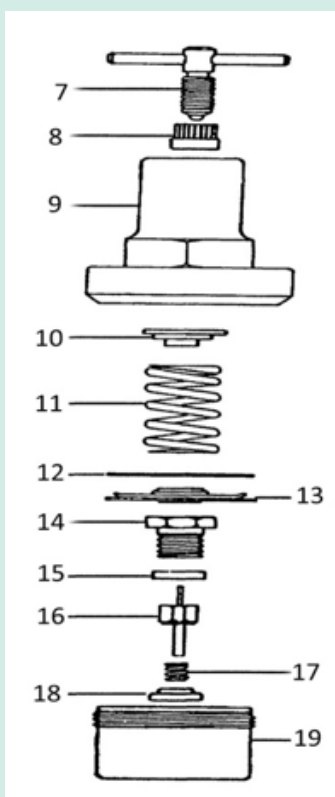
LIQUID MIXTURE

- Benzene 55% + 1-butene 23% + 1, 3 Butadiene 22% CLM03070510
- 1,3-Butadiene 0.8% + cis-2-Bane 10% + trans-2-butane 10%
+ trans-1-butane 30% + iso-butylene Balance CLM05073210
- Benzene 54.5% + 1-Butene 15% + cis-2-butene 7%
+ T-2-Butene 0.5 CLM05650510
- + 1,3 Butadiene 23%

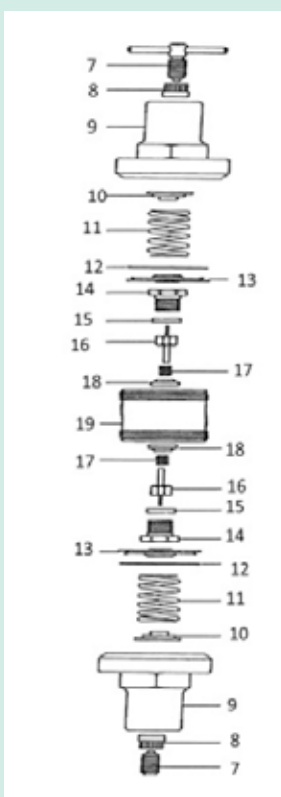
*We request users to discuss with us their specific needs (even if requirement is not mentioned in above list).
MSDS furnished on request*

Gas Pressure Regulator - an essential tool for gas handling system - is a device to control 'downstream pressure' from 'upstream source' in line with required working pressure that allows optimum gas to flow into the system. To use in Specialty Gases, the regulator must be made with stainless steel or chrome-plated brass depending on the purity level and corrosiveness of the pure gas or gas mixture. Pressure Regulators having stainless steel diaphragm, mechanically linked to the poppet assembly to provide additional sealing integrity. Apart from being a high sensitive control device, Diaphragm also prevents the diffusion of atmospheric oxygen into the carrier gases. For pressure control either stainless steel Diaphragm (for low and medium pressure at downstream) or stainless steel piston (for high downstream pressure) being used. Reduction of pressure in the Regulator can be done either in single stage (One Step Reduction) or in Double stage (Reduction In Two Steps). Inlet pressure gauge indicates cylinder pressure or the source pressure . Outlet Pressure indicates the pressure at which it is being delivered in the system.

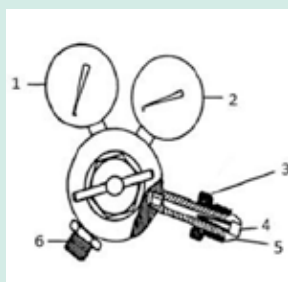
SINGLE STAGE REGULATOR



DOUBLE STAGE REGULATOR



- 1 Outlet Gauge
- 2 Inlet Gauge
- 3 Inlet Nut
- 4 Metal Filter
- 5 Inlet Bullnose Connection
- 6 Outlet Connection
- 7 Adj. Screw Lever Assembly
- 8 Bonnet Insert
- 9 Regulator Bonnet
- 10 Spring Button
- 11 Spring
- 12 Slip Ring
- 13 Diaphragm Assembly
- 14 Seat Housing
- 15 Seat Washer
- 16 Seat Assembly
- 17 Spring
- 18 Stem Guide Assembly
- 19 Body





How do you order for a Pressure Regulator - There are two ways:

- 1). Please check selection guide, write down accordingly and send to us for pricing and delivery schedule
- 2). If the specification is not known, please send following information:
 - a) Purpose (b) Service (c) Required Working Pressure (d) Inlet connection (e) Outlet Connection

REGULATOR SELECTION GUIDE

BODY & STAGES (A)	PRESSURE REDUCING METHOD (B)	UPSTREAM PRESSURE GAUGE RANGE (C)	DELIVERY PRESSURE GAUGE RANGE (D)	INLET CONNECTION (F)	OUTLET CONNECTION (G)
Single Stage Chrome Plated Brass A1	Diaphragm(SS 316) D	0-300 Bar (0-4500 Psi) C1	0-17m Bar (0-25psi) D1	5/8" BSP RH F1	1/4" Nut Ferrule G1
Single Stage Stainless Steel 304 A2	Piston P	0-280 Bar (0-4000 Psi) C2	0-2.1 Bar (0-30psi) D2	5/8" BSP LH F2	1/2" Nut Ferrule G2
			0-7 Bar (0-100 Psi) D3		
Single Stage Stainless Steel 316 A3		0-125 Bar (0-1781 Psi) C3	0-16 Bar(0-230psi) D4	1/4" FNPT F3	4mm-12mm Push Fit G3
Double Stage Chrome Plated Brass A4		0-40 Bar (0-570 Psi) C4	0-10 Bar (0-150 Psi) D5	1/2" FNPT F4	1/4" MBSP/NPT G4
Double Stage Stainless Steel 304 A5		0-16 Bar (0-300 Psi) C5	0-100 Bar (0-1500psi) D6	1" FNPT F5	1/2" MBSP/NPT G5
Double Stage Stainless Steel 316 A6		0-7 Bar (0-100 Psi) C6	0-150 Bar (0-2100) D7		

*We request users to discuss on their specific needs (even if requirement is not mentioned in above list).
MSDS is furnished on request*

It is essential that the product reaches the user safely and in excellent condition. This depends on a large extent on the condition and specification of the cylinders. CHEMIX cylinders are properly identified, thoroughly examined and prepared to fill the Specialty Gases. CHEMIX provides a wide variety of cylinders to meet specific customer needs depending on stability, safety and customer convenience. All the cylinders, in accordance with Gas Cylinder Rule and are approved by Chief Controller of Explosives. Cylinder specifications are given below for firsthand information to the users.

Code	108 ST	50 ST	47ST	41 ST	13 ST	10 ST	5 ST	3 ST	2 ST	1.5 ST	0.5SS	10AL	5AL	2AL	1AL	0.5AL	0.5AL
Diameter (cm)	36	24	23	25	14	14	11	11	10	26	20	18	11	11	11	10	10
Height (cm)	110	150	137	98	111	86	73	47	32	11	30	65	67	38	25	20	20
Water capacity (lt)	108	50	47	41	13.5	10	5	3	2	1.5	0.45	10	5	2.2	1.3	0.49	0.49
Tare Weight (kg)	30.7	61	54	53.5	19	16	8	7	4	3.5	3	12	4.7	2.5	1.8	0.3	0.3
Pressure	LP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	HP	LP
Material	ST	ST	ST	ST	ST	ST	ST	ST	ST	ST	S.S	AL	AL	AL	AL	AL	AL

LP- Low Pressure
HP- High Pressure

ST Steel
SS Stainless Steel

AL-Aluminium



We request users to discuss on their specific needs.



GAS MANIFOLD & FLEXIBLE CONNECTION

Manifold is the first step for the Gas Distribution System. There are different types of manifolds like Cylinder Mount, Single Cylinder Manifold, 2-Cylinder Manifold, Multiple Cylinders Manifold & Gas Bank. Usually change-over systems are connected with manifold. We design and fabricate as per requirement. For trouble-free & steady flow of gases, instead of rigid tube connecting cylinder to Manifold, Stainless Steel braided High Pressure Flexible Hose with the safety rope and spring is recommended. We supply different qualities, sizes and fittings depending on service & application.

We request users to discuss on their specific needs.



CYLINDER CHANGE-OVER SYSTEM

For uninterrupted supply of gases into a system through manifold, manual change-over system or auto change over-system are being used. CHEMIX design manifolds with both manual and auto change-over systems as per the requirement of particular service, no of cylinders, output pressure and considering the safety in handling.

We request users to discuss on their specific needs.

GAS TUBING / PIPING



We supply and install Gas Pipelines and Tubing with fittings and fixtures and also orbital welding as required. We design, fabricate and commission the system, for various laboratories. We take up turnkey projects.

We request users to discuss on their specific needs.

GAS DISTRIBUTION SYSTEM



Whether any particular gas is being distributed to various points of usage or various gases are being channelized into one system in the laboratory, proper gas distribution system is very essential for the right result. We design gas distribution systems on the basis of various parameters essentially required for the application.

We request users to discuss on their specific needs.



POINT-OF-USE REGULATOR

In continuation with the details mentioned in the Gas Pressure Regulator, we here by mention the Specific Regulator at the point of usage in a laboratory. Gas supplied from the gas manifold system through the pipelines and tubing reaches the laboratory at particular pressure for which a control mechanism is needed to drop down the pressure at which gas passes into number of different instruments from the same source at different pressures as required by the application. Point-of-Use regulator is set at particular downstream pressure for steady and uninterrupted flow.

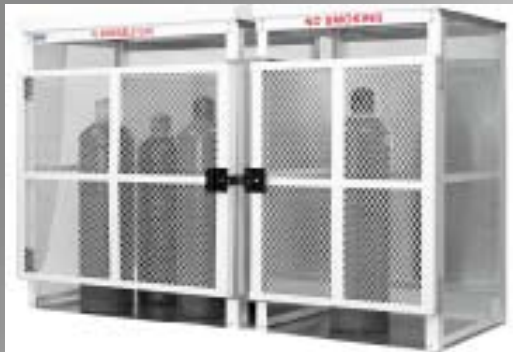
We request users to discuss on their specific needs.



CYLINDER TROLLEYS

To move cylinders from one place to other place, cylinder trolleys are being used. Specific trolleys for different sizes of cylinders are available. We make single cylinder trolleys and double cylinder trolleys having different combination of wheels. We also manufacture Step Trolleys to move the cylinder through staircases reaching to different floors.

We request users to discuss on their specific needs.



CYLINDER STORAGE

Storage of gas cylinders are guided by Gas Cylinder Rules. Cylinders should be stored in well ventilated enclosures away from any flame or flammable items. Cylinders when kept outside of any building must be kept in a cylinder cage protected from direct sunlight and rain. Different types of cylinders are stored separately. We design the cylinder storage cages as per rules and safety guidelines.



We request users to discuss on their specific needs.

GAS CABINETS



CHEMIX Gas Cabinets & Panels are designed to dispense gases in a controlled manner to a given process and protect the surroundings from exposure to gases & chemicals. Any industry using or processing hazardous gases should consider these products. We design Gas Cabinet and control panel thereof on the basis of physical properties of the gases, cylinder size, pressure and flow required for the process including precautions related to safety and hazards.

We request users to discuss on their specific needs.



GAS PURIFICATION PANEL

Carrier Gases in laboratory are connected with Gas Purification Panel for reduction of impurities particularly Oxygen, Moisture & Hydrocarbon. The Regulator, Pressure Gauge and Valves (toggle) are connected in the Purification Panel for controlling the gas flow into the system. Various combination of Oxy-Trap, HC- Trap and Moisture Trap are available.

We request users to discuss on their specific needs.



FLOW METER

Flow meter is used to regulate the flow of gas in to the system. Different types of flow meters are available depending on service, flow range and list count. Depending on application - Rota meter, Mass flow meter or Mass flow controllers are selected for the optimum result.

We request users to discuss on their specific needs.

LEAK DETECTION AND SAFE HANDLING



While using toxic, flammable and hazardous gases in any system, it is essential to check any leakage in the system for safe handling and ensuring the safety of personnel in the Laboratory and the environment. Leak Detectors which are fitted with specific sensors are used to detect any leakage in the system. In case of any leakage developed, one gets alert through audio as well indication light. System can be synchronized to shut off the gas line through solenoid valve, the moment leakage occurs. Usually detectors are set below LEL (Lower Explosive Limit). So that it is handled in a safe manner. For various gases, separate detectors are available.

We request users to discuss on their specific needs.

FUME CHAMBER



While handling various chemicals in laboratory, it is absolutely necessary to protect laboratory personnel and surrounding from vapors and gases beyond permissible limit. Scientific Fume Chambers being used with proper extractor and flow control mechanism to serve the purpose. We supply various types of fume chambers depending on the chemical used and detailed application.

We request users to discuss on their specific needs.

GAS GENERATORS



Our range of generators include Cryogenic, Adsorption & Membrane technologies to meet all typical flow pressure & purity requirements of on-site gas generation. We supply Gas Generators for analytical instrumentation including Hydrogen Generators for fuel and carrier gas, Nitrogen Generators for LCMS, ICP, UHP & Zero low flow & mid flow Nitrogen Generators, Makeup Gas Generators, GC Gas Stations, FID Gas Stations, FT-IR Purge Gas Generators, LCMS Tri-Gas Generators, TOC Gas Generators and ultra-dry Air Generators.

We request users to discuss on their specific needs.

SCRUBBERS



Hazardous gases, while emitting from the outlets in various laboratories, need to be neutralized using proper desiccants or channelized through a device containing required chemicals before releasing into the atmosphere. We supply Scrubbers in standard model as well as customized design specific to customer needs.

We request users to discuss on their specific needs.

GAS	MOLECULAR FORMULA	MOLECULAR WEIGHT (g/mol)	FREEZING POINT (°C)	BOILING POINT (°C)	VAPOUR PRESSURE AT 20°C (bar)	SPECIFIC VOLUME (m3/kg)	SPECIFIC GRAVITY AT 25°C	CRITICAL TEMPERATURE (°C)
Acetylene	C2H2	26.04	-80.8	-84.7	43.403	0.92	0.91	36.3
Air		28.96	..	-194.3	..	0.83	1	-141
Ammonia	NH3	17.03	-77.73	-33.33	8.85	1.42	0.6	132.4
Argon	Ar	39.95	-189.35	-185.85	..	0.61	1.38	-122.28
1,3-Butadiene	C4H6	54.09	-108.9	-4.5	2.43	0.43	1.92	152
1-Butene	C4H8	56.11	-185.35	-6.61	2.63	0.42	1.93	146.14
n-butane	C4H10	58.14	-135.4	-0.6	1.12	0.41	2.08	151.9
Iso-Butane	C4H10	58.14	-160	-11.7	2.11	0.41	2	134.9
Cis-2-Butene	C4H8	56.1	-138.89	3.72	1.95	0.43	1.997	162.4
Trans -2- Butene	C4H8	56.11	-105.53	0.88	2.09	0.43	1.93	155.46
Carbon dioxide	CO2	44.01	-56.57	-78.45	57.29	0.55	1.53	30.98
Carbon monoxide	CO	28.01	-205.07	-191.5	3	0.87	0.97	-140.29
Chlorine	Cl2	70.91	-101	-34.1	6.95	0.34	2.49	144
Di-ethyl ether	C4H10O	74.12	-116.3	34.6	0.58	0.39	0.71	192.7
Di -methyl amine	(CH3)2NH	45.09	-93	7	1.7	0.53	1.55	164.6
Di-methyl ether	C2H6O	46.07	-141.49	-24.81	5.09	0.52	1.59	127.15
Ethane	C2H6	30.07	-183.3	-88.58	38.46	0.81	1.05	32.17
Ethylene	C2H4	28.05	-169.15	-103.77	..	0.87	0.98	9.2
Ethylene oxide	C2H4O	44.05	-112.06	10.5	1.5	0.55	1.52	195.8
Fluorine	F2	38	-219.7	-188.1	..	0.64	1.312	-128.2
Helium	He	4.003	-272.01	-268.9	..	6.12	0.14	-267.9
Hydrogen	H2	2.016	-259.2	-252.9	..	11.98	0.07	-240.2
Hydrogen sulphide	H2S	34	-85.7	-60.3	18.8	0.71	1.19	100.4
n-Hexane	C6H14	86.18	-95.3	68.7	0.17	0.16	0.66	..
Iso-butylene	C4H8	56.1	-140.4	-6.9	1.64	0.5	1.95	144.73
Iso-pentane	C5H12	72.15	-159.9	27.85	0.77	0.19	0.62	..
Krypton	Kr	83.8	-157.37	-153.42	..	0.29	2.9	-63.67
Methane	CH4	16.043	-182.46	-161.48	..	1.52	0.56	-82.59
Neon	Ne	20.18	-248.59	-246.08	..	1.21	0.696	-228.7
Nitric oxide	NO	30.006	-161	-151.77	..	0.81	1.04	-93
Nitrogen	N2	28.013	-210	-195.8	..	0.87	0.97	-146.96
Nitrogen dioxide	NO2	46.01	-11.2	21.1	1.02	0.512	2.62	158.2
Nitrous oxide	N2O	44.01	-90.82	-88.47	50.53	0.55	1.53	36.37
Oxygen	O2	31.999	-218.78	-182.96	..	0.76	1.11	-118.57
Propane	C3H8	44.096	-187.68	-42.11	8.59	0.55	1.55	96.74
Propylene	C3H6	42.08	-185.26	-47.62	10.17	0.57	1.48	91.06
n-Pentane	C5H12	72.15	-129.7	36.07	0.57	0.4	0.63	196.6
Sulphur dioxide	SO2	64.06	-73.15	-10.02	3.43	0.38	2.26	157.49
Sulphur hexafluoride	SF6	146.06	-50.7	-68.25	21.49	0.17	5.11	45.57
Xenon	Xe	131.29	-111.79	-108.1	56.55	0.19	4.56	16.59

We request users to discuss their specific needs.

Multiply	LENGTH By	To Obtain	Multiply	AREA By	To Obtain
Angstrom	1 x 10 ⁻¹⁰	Meters	Sqare Cm	1.1960 x 10 ⁻⁴	Square Yards
	3.9370 x 10 ⁻⁹	Inches		0.00108	Square feet
	1 x 10 ⁻⁴	Microns		0.155	Square inches
	1 x 10 ⁻⁸	Centimeters		1 x 10 ⁻⁴	Square meters
	0.1	Mill microns		100	Square mm
Microns (um)	3.9370 x 10 ⁻⁵	Inches	Sqare Km	0.3861	Square miles
	1 x 10 ⁻⁶	Meters		1.1960 x 10 ⁶	Square Yards
	1 x 10 ⁻⁴	Centimeters		1.0764 x 10 ⁷	Square feet
	1 x 10 ⁴	Angstrom		1 x 10 ⁶	Square meters
Centimeter	0.3937	Inches	Square inches	0.00694	Square feet
	1 x 10 ⁴	Microns		0.00077	Square Yards
	1 x 10 ⁷	Mill microns		6.4516 x 10 ⁻⁴	Square meters
	1 x 10 ⁸	Angstrom		6.4516	Square cms
Meters	6.2137 x 10 ⁻⁴	Miles	VOLUME		
	1.0936	Yards	Multiply	By	To Obtain
	39.37	Inches	Cubic Cms (or ml)	42280	Liters
	1x 10 ⁹	Mill microns		0.061	0.061 Cubic Inches
	3.28	Feet	Cubic Feet	28317	Cubic cm
Kilometer	0.5361	Miles (nautical)		1728	Cubic Inches
	0.62137	Miles (statute)		0.028317	Cubic Meters
	1093.6	Yards		7.481	Gallons
	3280.8	Feet		28.317	Liters
Inches	2.54	Centimeters	Cubic Inches	16.387	Cubic cm
	2.54 x 10 ⁸	Angstrom units		0.01639	Liters
Feet	0.348	Meters	Cubic Meters	35.3145	Cubic Feet
	30.48	Centimeters		10 ³	Liters
VELOCITY				4.329 x 10 ⁻³	Gallons
Multiply	By	To Obtain	Ounces (fluid)	29.57	Cubic cm
Kilometer / hour	0.6211	Miles per hour		1.805	Cubic Inches
	54.6747	Feet / minute	Liters	0.2642	Gallons
	27.7	Centimeters / sec		0.0353	Cubic ft.
		Nautical miles / hour		1.0567	Quarts
Knots	1	Feet / second		61.025	Cubic Inches
	1.6889	Miles / hour			
	1.1515	Kilometers / hour			
	1.8532	Meters / second			
	0.5148				

PRESSURE		
Multiply	By	To Obtain
Atmosphere	760	Millimeters of Mercury
	29.921	Inches of Mercury
	33.93	Feet of Water 10332
	14.696	lbs./ sq. in (psi)
	2216.2	lbs. / sq. ft.
	1.0133	Bars
Centimeters of Mercury	1.0332	Kg/cm2
	5.3524	Inches of Water
	0.446	Feet of Water
	0.1934	lbs. / sq. in. (psi)
Feet of Water	27.854	lbs. / sq. ft.
	135.95	kg/cm2
	0.02947	Atmosphere
	0.4335	lbs. / sq. in. (psi)
Inches of Mercury	27.854	lbs. / sq. ft.
	0.03342	Atmosphere
	13.6	Inches of Water
	1.133	Feet of Water
Inches of Water	0.4912	lbs. / sq. in. (psi)
	70.727	lbs. / sq. ft.
	345.32	kg/m2
	0.03609	lbs./ sq. in (psi)
Kg/cm2	5.1981	lbs./sq. ft.
	25.38	kg/m2
	0.9678	Atmosphere
	14.22	lbs./ sq. in. (psi)
Kilopascal	0.00987	Atmosphere
	0.29613	Inches of Mercury (60 deg F)
	0.33456	Feet of Water (39.2 deg F)
	101.972	kg/m2
Pounds / square inch (psi)	0.14504	lbs/ sq. inch (psi)
	20.8854	lbs./sq. ft.
	0.01	Bar
	0.0102	kg/cm2
Pounds / square inch (psi)	0.07032	kg/cm2
	2.036	inches of Mercury
	2.311	feet of water
	6.8948	Kilopascals

TEMPERATURE		
Multiply	By	To Obtain
Celsius (C) + 273.16	1	Degree C Absolute or Kelvin (K)
Celsius (C) + 17.78	1.8	Degree Fahrenheit (F)
Fahrenheit (F) +459.72	1	Degree F Absolute or Rankin (R)
Fahrenheit (F) - 32	9-May	Degree Celsius (C)
Kelvin (K) - 273.16	1	Degree Celsius (C)
Rankin (R) - 459.72	1	Degree Fahrenheit (F)
WEIGHT		
Multiply	By	To Obtain
Milligram	2.2046 x 10-6	Pounds
	3.5274 x 10-5	Ounces
	0.01543	Grains
	1 x 10-6	Kilograms
Microgram	1 x 10-6	Grams
Grams	0.0022	Pounds
	0.03527	Ounces
	15.432	Grains
	2.2046	Pounds
Kilograms	35.274	Ounces
	1.5432 x 10-4	Grains
	1.4286 x 10-4	Pounds
	0.00229	Ounces
Grains	0.0648	Grams
	64.799	Milligrams
	1000	Kilogram
	2205	Pounds
Tons (metric)	1.102	Tons (short)
DENSITY		
Multiply	By	To Obtain
Grams / Cubic cm (or mm)	62.428	Pounds per Cubic Feet. (or mm)
	0.03613	Pounds per Cubic Inch
	1728	Pounds per Cubic Feet
	27.68	Grams per Cubic cm
Gram-moles of Ideal Gas		
@ 0deg C and 760 mm Hg	22.4140	Liters
Pounds-moles of Ideal Gas		
@ 0deg C and 760 mm Hg	359.05	Cubic Feet

This Catalogue Showcases Premier Information Only.
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