



Praxair has been serving the health-care market for over 50 years. Praxair has state of the art cylinder filling and quality assurance facilities for the preparation of high purity gases and high accuracy mixtures for research diagnostics and inhalation therapy applications. The products classified by Food and Drug Administration (FDA-USA) and Health Canada as drugs or devices are produced in accordance with Good Manufacturing Practices (GMP). Praxair facilities are assessed internally and audited by the FDA and HPFBI (Health Products and Food Branch Inspectorate)

Mixture Product Summary

The following mixture product summary represents the most common medical mixtures and applications in the health-care industry. Praxair can accommodate most customer requests and specialized needs.

A physician's independent and institutional review board approval is required for any investigational mixture to be used in humans.

In Canada, a physician must obtain approval from the Special Access Program of Health Canada in order for Praxair to supply gases to be used as drugs but have not been registered with a D.I.N. (Drug Identification Number)

Accordingly preparation of specific mixtures are subject to prior approval by Praxair.

Gas Mixture Components for Medical Mixtures

U.S.P. and N.F. Grades

- N₂ – Nitrogen (NF)
- CO₂ – Carbon Dioxide
- He – Helium
- N₂O – Nitrous Oxide
- O₂ – Oxygen

Non-U.S.P. Grades

- C₂H₂ – Acetylene
- CO – Carbon Monoxide
- H₂ – Hydrogen
- CH₄ – Methane
- Ne – Neon
- Xe – Xenon

Part Number	Major Application and Mixture Description	Cylinder Style	CGA	Contents* ft ³ /m ³	Regulator Recommendation
Therapy – Medical Drug Gases					
MM OXCD5	Carbon Dioxide 5%/Oxygen	K	500	226/6.26	200 Series (F17-F19) or 109 Series (F20)
MM OXCD10	Carbon Dioxide 10%/Oxygen	K	500	226/6.26	
MM HEOX20	Oxygen 20%/Helium	K	280	199/5.51	200 Series (F17-F19) or 109 Series (F20)
MM HEOX30	Oxygen 30%/Helium	K	280	199/5.53	
Diagnostic – Medical Device Gases					
Lung Diffusion for Pulmonary Function Studies					
LD CO1	Carbon Monoxide 0.3%, Helium 10%, Oxygen 21%/N ₂	K	500	209/5.78	200 Series (F17-F19) or 109 Series (F20)
LD NE1	Carbon Monoxide 0.3%, Neon 0.5%, Oxygen 21%/N ₂	K	500	213/5.89	
LD ME1	Carbon Monoxide 0.3%, Methane 0.3%, Oxygen 21%/N ₂	K	500	213/5.89	
LD AC2	Acetylene 0.3%, Carbon Monoxide 0.3%, Methane 0.3%, Oxygen 21%/N ₂	K	500	213/5.89	
Diagnostic – Blood Gas Analysis					
BG NICDR1	Carbon Dioxide 2-14%/Nitrogen	K	500	228/6.32*	200 Series (F17-F19) or 109 Series (F20)
BG OXCDR1	Carbon Dioxide 7-12%/Oxygen	K	500	233/6.45*	
BG NIOXR1	Oxygen 1-19%/Nitrogen	K	500	228/6.32*	
BG NICDOXR1	Carbon Dioxide 2-12%, Oxygen 12-25%/Nitrogen	K	500	228/6.32*	

Biological Incubation Atmospheres

See page E23 for specific mixture details

* Approximate contents; actual contents will vary by concentration.

For ordering purposes, please add the desired cylinder style to the end of the designated part number.

Diagnostic gas mixtures are typically ordered as certified standards, but can also be produced to meet primary standard grade. For applications that do not require a reported analysis, such as biological atmospheres and medical laser gases, non-certified grades are typically ordered.