

NFPA 99C/CGA C-9 STANDARD FOR MEDICAL GAS MARKERS



COMPLIES WITH NFPA-99C; CGA C-9 2002
STANDARD INDUSTRY COLOR CODING RECOMMENDATIONS

The standards for the labeling of medical gases were established through collaboration with the National Fire Protection Association (NFPA) and The Compresses Gas Association (CGA). The purpose of the standard is to ensure uniformity for the identification and marking of medical equipment intended for use with specific medical gases.

Current Pipe Labeling Standards

Medical Gas piping shall be labeled by adhesive markers or stencils that identify patient medical gas, the support gas or vacuum system, and include:

- The name of the gas/vacuum system or the chemical symbol as outlined in the table below
- Color of marker in accordance with gases or vacuum system outlined
- In instances where piping systems operate at pressures other than standard gauge pressure (outlined in table), pipe labeling shall include pressure in addition to the name of the gas.

GAS SERVICE	ABBREVIATED NAME	STANDARD GAUGE PRESSURE	COLORS (BACKGROUND/TEXT)	
Carbon Dioxide	CO ₂	50-55 psi	Gray/Black or Gray/White	
Helium	He	50-55 psi	Brown/White	
Instrument Air		160-185 psi	Red/White	
Laboratory Air		None	Yellow and White Checkerboard/Black	
Laboratory Vacuum		None	White and Black Checkerboard/Black Boxed	
Medical Air	Med Air	50-55 psi	Yellow/Black	
Medical–Surgical Vacuum	Med Vac	15 in to 30 in HgV	White/Black	
Nitrogen	N ₂	160-185 psi	Black/White	
Nitrous Oxide	N ₂ O	50-55 psi	Blue/White	
Nonmedical Air (Level 3 gas-powered device)		None	Yellow and White Diagonal Stripe/Black	
Nonmedical Vacuum and Level 3 Vacuum		None	White and Black Diagonal Stripe/Black Boxed	
Oxygen	O ₂	50-55 psi	Green/White or White/Green	
Oxygen/Carbon Dioxide Mixtures	O ₂ , CO ₂ n% (n is % of CO ₂)	50-55 psi	Green/White	
Waste Anesthetic Gas Disposal	WAGD	Varies with system type	Violet/White	
Other Mixtures	Gas A%/Gas B%	None	Colors as above for major gas background/minor gas for text	



NFPA 99C establishes criteria for levels of health care services or systems based on risk to the patients, staff, or visitors in health care facilities to minimize the hazards of fire, explosion, and electricity. NFPA 99C establishes which medical equipment should be labeled, where labels should be applied, and label legend content. CGA C-9 indicates label color codes for specific medical gases.

Pipe Marker Placement

Pipe markers should be located as follows:

- At intervals of not more than 20 feet
- On both sides of walls or partitions penetrated by the piping
- At least once in or above every room
- At least once in every story height traversed by risers

MSI Medical Pipe Markers

Marking Services, Inc. medical gas markers are manufactured per NFPA-99C; CGA C-9-2002 "Standard Industry Color Coding Recommendations for Medical Gases."

- Color, legend and flow direction combined on one pressure-sensitive marker for easy installation
- Designed to fit up to 1" diameter pipes
- Clearly shows both contents and flow direction
- Letters are 1/4" high
- Supplied in rolls of 100 labels or individual pieces
- Markers are 3" x 3" and wrap completely around the pipe

