



# 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 Compressed 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 operating pressure in addition to the name of the gas.

Gas Service	Abbreviated Name	Standard Gauge Pressure	Colors Background/Text	
Carbon Dioxide	CO <sub>2</sub>	50-55 psi	Gray/Black or Gray/White	SAMPLE
Helium	He	50-55 psi	Brown/White	SAMPLE
Instrument Air		160-185 psi	Red/White	SAMPLE
Laboratory Air		None	Yellow & White Checkerboard/Black	SAMPLE
Laboratory Vacuum		None	White & Black Checkerboard/Black Boxed	SAMPLE
Medical Air	Med Air	50-55 psi	Yellow/Black	SAMPLE
Medical Surgical-Vacuum	Med Vac	15 in to 30 in HG	White/Black	SAMPLE
Nitrogen	N <sub>2</sub>	160-185 psi	Black/White	SAMPLE
Nitrous Oxide	N <sub>2</sub> O	50-55 psi	Blue/White	SAMPLE
Non-Medical Air (Level 3 Gas-Powered Device)		None	Yellow & White Diagonal Stripe/Black	SAMPLE
Non-Medical Vacuum & Level 3 Vacuum		None	White & Black Diagonal Stripe/Black Boxed	SAMPLE
Oxygen	O <sub>2</sub>	50-55 psi	Green/White or White/Green	SAMPLE
Oxygen/Carbon Dioxide Mixtures	O <sub>2</sub> , CO <sub>2</sub> n% (n is % of CO <sub>2</sub> )	50-55 psi	Green/White	SAMPLE
Waste Anesthetic Gas Disposal	WAGD	Varies with system type	Violet/White	SAMPLE
Other Mixtures	Gas A%/Gas B%	None	Colors as above, major gas for background color, minor gas for text color	

NFPA 99C establishes criteria for levels of health care services or systems based on risk to the patients, staff, or visitors in healthcare 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
- At least once in or above every room
- On both sides of walls or partitions penetrated by the piping
- 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



**Marking Services Inc.**

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