## CAN/CSA Z7396.1-09 STANDARD FOR MEDICAL GAS MARKERS



COMPLIES WITH CAN/CSA Z7396.1-09
STANDARD INDUSTRY COLOR CODING RECOMMENDATIONS

The standards for the labeling of medical gases were established through collaboration with the Standards Council of Canada (SCC) and The Canadian Standards Association (CSA). 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 that identify patient medical gas, the support gas or vacuum system, and include:

- The name of the gas/vacuum system of the chemical symbol as outlined in the table below
- Color of marker in accordance with gases or vacuum system outlined
- Lettering at least 9 mm (3/8 in) high
- Arrows for direction of flow(s)

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GAS SERVICE	ABBREVIATED NAME	NOMINAL PIPE PRESSURE	COLORS (BACKGROUND/TEXT)	
Carbon Dioxide	CO₂	345 kPa +35/-0	Gray/Black or Gray/White	SAMPLE
Helium	He	345 kPa +35/-0	Brown/White	SAMPLE
Instrument Air		1145 kPa +173/-0	White and Black Diagonal Stripes/Black in White Box	SAMPLE
Medical Air	MedAir	345 kPa +35/-0	Half Black, Half White/ Half White, Half Black	SAMPLE
Medical–Surgical Vacuum	MedVac	380-760 mm Hg	Yellow/Black	SAMPLE
Nitrogen	N <sub>2</sub> or HPN <sub>2</sub>	1145 kPa +173/-0	Black/White	SAMPLE
Nitrous Oxide	N₂O	345 kPa +35/-0	Blue/White	SAMPLE
Oxygen	O <sub>2</sub>	345 kPa +35/-0	White/Green	SAMPLE
Anaesthetic Gas Scavenging System	AGSS	Varies with System Type	Red Magenta/White	SAMPLE
Gas Mixtures	Gas A%/Gas B%	345 kPa +35/-0	Colors as above for major gas background/minor gas for text	



## **Pipe Marker Placement**

Pipe markers should be applied with the lettering parallel to the axis of the pipe and located as follows:

- At intervals of 6 m (20 ft) before and after barriers
- At each valve
- At each point of connection to the medical gas pipeline distribution
- Behind every access door
- At each inlet and outlet point
- At each intake, exhaust and vent

## **MSC Medical Pipe Markers**

Marking Services Canada (MSC) medical gas markers are manufactured per CAN/CSA Z7396.1-09 "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 25 mm (1 in) diameter pipes
- Clearly shows both contents and flow direction
- Supplied in rolls of 100 labels or individual pieces
- Markers are 76 mm x 76 mm (3 in x 3 in) and wrap completely around the pipe



For more information on the CAN/CSA Z7396.1-09 Standard, please visit the following source:

The Canadian Standards Association - http://shop.csa.ca/en/canada/perioperative-safety/z73961-09/invt/27025122009