

ISO

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IDENTIFICATION OF MEDICAL GAS CYLINDERS

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IDENTIFICATION OF MEDICAL GAS CYLINDERS

1. SCOPE

The present ISO Recommendation applies to the identification of small cylinders containing medical gases and fitted with valves of the flush type.

2. MARKING

Each cylinder should be marked with the name of the gas it contains, either in the language of the country in which it is filled, or in the language preferred or adopted in that country, and should be legibly marked with the chemical formula, except in the case of cyclopropane. The marking should be at the valve end of the cylinder and preferably away from the cylindrical part of the body.

3. COLOUR MARKING

Each cylinder should bear a colour corresponding to the gas it contains, as shown in the table below, and applied in such a manner that the colour is visible from the valve end.

In the case of gas mixtures, the cylinder should bear the appropriate colours for the gases comprising the mixture, such colours to be visible from the valve end.

Names of gases	Symbols	Colours
Oxygen	O ₂	White
Nitrous oxide	N ₂ O	Blue
Cyclopropane	—	Orange
Carbon dioxide	CO ₂	Grey
Ethylene	C ₂ H ₄	Violet
Helium	He	Brown
Nitrogen	N ₂	Black
Oxygen and carbon dioxide	O ₂ + CO ₂	White and Grey
Oxygen and helium	O ₂ + He	White and Brown
Air	—	White and Black

The identification colours should approximate as closely as possible to those which are defined in the table below, on the one hand, by the samples and, on the other, by the chromaticity coordinates and illuminance factor of the C.I.E. (International Commission on Illumination) colorimetric system.

Identification colours		Chromaticity coordinates*		Illuminance factor*
		x	y	β per cent
Blue		0.191	0.164	7.92
Orange		0.581	0.399	27.6
Grey		0.361	0.381	31.5
Violet		0.351	0.231	5.94
Brown		0.518	0.415	7.08

* These values are for illuminant B , colour illuminated normally and viewed at 45° .