



Technical Bulletin

by The Purification X-perts™ at X-ZAM® LABS

NOTICE OF CHANGE TO THE “COMPRESSED GAS ASSOCIATION, INC. COMMODITY SPECIFICATION FOR AIR CGA G-7.1-1997”

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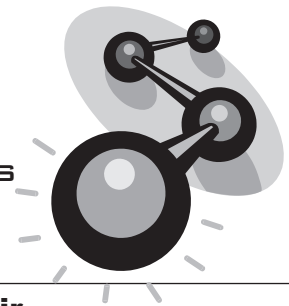
Recently, the Compressed Gas Association was petitioned to change the commodity specification for air G-7.1 Grade “E” standard which governs the quality of compressed breathing air for below surface uses.

The proposed change was for increasing the allowable maximum limits of Carbon Dioxide (CO₂) from 500 ppm to 1000 ppm. The reasoning behind this change was that the previous level of 500 ppm had no physiological merits when applied to the partial pressures of

diving. Numerous testimony from a number of qualified sources was submitted to the CGA technical committee dealing with the effects of carbon dioxide on the body at partial pressures and at various levels of exertion. Data showed that a revised maximum level of 1000 ppm carbon dioxide was indeed safe for the CGA Grade “E” standard.

Lawrence Factor’s X-zam Lab Services will reflect this new standard in all it’s air analysis that contain the CGA Grade “E” standards.

See chart below:



DIRECTORY OF LIMITING CHARACTERISTICS
(Units in ppm (v/v) unless shown otherwise)
Quality verification levels (grades)

Limiting Characteristics	Maxima For Gaseous Air					
	Grade A	Grade L	Grade D	Grade E	Grade J	Grade N
Carbon Dioxide			1000	<u>1000</u>	0.5	500
Carbon Monoxide			10	10	1	
Dew Point, °F		<u>-65</u>			-104	
Halogenated Solvents					0.1	
Nitric Oxide						2.5
Nitrogen Dioxide					0.1	2.5
Nitrous Oxide					0.1	
Odor		None	None	None	None	None
Oil, Particles			5	5		None*
Oxygen	% 19.5 - 23.5	% 19.5 - 23.5	% 19.5 - 23.5	% 20 - 22	% 19.5 - 23.5	% 19.5 - 23.5
Sulfur Dioxide					0.1	5
Total Hydrocarbon content (as methane)				25	0.5	
Water		24			1	

* Includes Water