

## Hydrogen (H<sub>2</sub>)

• Other balance gases and cylinder sizes are available upon request.

| Hydrogen in Air    |                         |                        | Hydrogen in Argon |                         |                        |
|--------------------|-------------------------|------------------------|-------------------|-------------------------|------------------------|
| Concentration      | Cylinder<br>Size        | ≈Contents<br>ft³       | Concentration     | Cylinder<br>Size        | ≈Contents<br>ft³       |
| 1 ppm – < 1000 ppm | 200<br>150A<br>80<br>35 | 217<br>146<br>86<br>34 | 1 ppm - < 100 ppm | 200<br>150A<br>80<br>35 | 217<br>152<br>90<br>32 |
| 1000 ppm – 2.5%    | 200<br>150A<br>80<br>35 | 217<br>146<br>86<br>34 | 100 ppm – <1%     | 200<br>150A<br>80<br>35 | 227<br>152<br>90<br>35 |
|                    |                         |                        | >1%               | 200<br>80<br>35         | 214<br>85<br>33        |

Cannot exceed 2.5% in Air. Primary Standards available for concentrations greater than 2 ppm.

Standard Valve Outlet: CGA 590 Individual Certificate of Analysis or Certificate of Batch Analysis included.

Hydrogen in Helium Hydrogen in Nitrogen Cylinder Size Cylinder Size Concentration Concentration 200 196 200 215 1 ppm – < 100 ppm 150A 132 1 ppm - < 100 ppm 150A 144 80 77 80 85 35 30 35 33 200 200 196 215 100 ppm – < 1% 150A 132 100 ppm – < 1% 150A 144 80 85 77 80 30 35 35 33 200 196 200 224 > 1% 80 77 > 1% 80 89 35 30 35 35 Primary Standards available for concentrations greater than 2 ppm. Standard Valve Outlet: CGA 350 Individual Certificate of Analysis or Certificate of Batch Analysis included. Primary Standards available for concentrations greater than 2 ppm. Standard Valve Outlet: CGA 350 Individual Certificate of Analysis or Certificate of Batch Analysis included.

| Technical Data & Shipping Information   |                  |  |  |
|---|------------------|--|--|
| Cylinder Pressure   | 2000 psig        |  |  |
| U.S. DOT Class:   |                  |  |  |
| $\rm H_2$ in Air, or $\leq$ 2.93% in Ar, or $\leq$ 3.9% in He, or $\leq$ 5.7 in $\rm N_2$ | 2.2              |  |  |
| All Others  | 2.1              |  |  |
| U.S. DOT Label:   |                  |  |  |
| $H_2$ in Air, or $\leq 2.93\%$ in Ar, or $\leq 3.9\%$ in He, or $\leq 5.7\%$ in $N_2$     | Nonflammable Gas |  |  |
| All Others  | Flammable Gas    |  |  |
| ID Number:  |                  |  |  |
| $H_2$ in Air, or $\leq 2.93\%$ in Ar, or $\leq 3.9\%$ in He, or $\leq 5.7\%$ in $N_2$     | UN1956           |  |  |
| All Others  | UN1954           |  |  |

Primary Standards available for concentrations greater than 2 ppm.

Individual Certificate of Analysis or Certificate of Batch Analysis included.

Standard Valve Outlet: CGA 350

Equipment Recommendations are found on page 36