

Hydrogen



Transportation Information



UN Number: 1049

| Shipping Name | Hydrogen, Compressed | Hydrogen, Compressed | Hydrogen, Compressed |
|---------------|----------------------|----------------------|----------------------|
| Hazard Class | 2.1 | 2.1 | 2.1 |
| Label | Flammable Gas | Flammable Gas | Flammable Gas |

(M)SDS Reference

P-4604

CAS Number

1333 - 74 - 0

General Description

Colorless, odorless, flammable gas.

| Product/Grade | Purity | Part Number | Cylinder | N ₂ | O ₂ | H ₂ O | CO ₂ | CO | THC | Ar |
|----------------------------|----------|-------------|-------------|----------------|----------------|------------------|-----------------|-----|-----|-----|
| Research, 6.0 | 99.9999% | HY 6.0RS | T, K | 0.5 | 0.1 | 0.5 | 0.1 | 0.1 | 0.1 | 0.1 |
| Chromatography, 6.0 | 99.9999% | HY 6.0CH | T, K, | 0.5 | 0.5 | 0.5 | 0.1 | 0.1 | 0.1 | - |
| Semiconductor Process, 6.0 | 99.9999% | HY 6.0SP | T, K | 0.5 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | - |
| Carrier, 5.5 | 99.9995% | HY 5.5CA | T, K, | 3 | 1 | 1 | 0.5 | 0.5 | 0.5 | - |
| Semiconductor Process, 5.5 | 99.9995% | HY 5.5SP | T, K | 2 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | - |
| Ultra High Purity, 5.0 | 99.999% | HY 5.0UH | T, K, Q | - | 1 | 3 | - | - | 0.5 | - |
| Semiconductor Process, 5.0 | 99.999% | HY 5.0SP | T, K | 6 | 2 | 3 | 1 | 1 | 1 | - |
| Zero, 4.5 | 99.995% | HY 4.5Z | T, K | - | 5 | 3 | - | - | 0.5 | - |
| High Purity, 4.5 | 99.995% | HY 4.5 | 6K, T, K, Q | - | 5 | 5 | - | - | - | - |

Concentrations given are ppm by volume unless otherwise specified. Maximum ppm unless otherwise noted.

Section B – Pure Gases

Cylinders

| Cylinder Type | Style | Size in (cm) | Connection CGA/DISS | Pressure psig (bar) | Volume lb (kg) | Gross Weight lb (kg) |
|---------------|---------------------------|-------------------------|---------------------|---------------------|----------------|----------------------|
| 6K | Ultra High Pressure Steel | 51 x 10 (129.5 x 24.4) | 703 | 6000 (460) | 484 (13.98) | 306 (139) |
| T | High Pressure Steel | 55 x 9.3 (139.7 x 23.5) | 350/724 | 2400 (183) | 261 (7.24) | 145 (66) |
| K | High Pressure Steel | 51 x 9 (129.5 x 22.9) | 350/724 | 2000 (138) | 196 (5.44) | 134 (61) |
| Q | High Pressure Steel | 31 x 7 (78.7 x 17.8) | 350 | 2000 (138) | 65 (1.80) | 65 (30) |

Cylinder packs and tube trailers are available upon request.

Equipment Recommendations

| | | | |
|----------------------------|------------------------------------|----------------------------|-----------------------|
| Research, 6.0 | Valve panel, 4000 series regulator | Ultra High Purity, 5.0 | 3000 series regulator |
| Chromatography, 6.0 | Valve panel, 4000 series regulator | Semiconductor Process, 5.0 | 3000 series regulator |
| Semiconductor Process, 6.0 | Valve panel, 4000 series regulator | Zero, 4.5 | 2000 series regulator |
| Carrier, 5.5 | 3000 series regulator | High Purity, 4.5 | 2000 series regulator |
| Semiconductor Process, 5.5 | 3000 series regulator | | |