



## CERTIFICATE OF CONFORMANCE

**Keen Compressed Gas Co.** Quality Control Program, Enables Keen To Meet or Exceed the Minimum Specifications Listed For The Product Grades Named Below In Compliance With Standard Operating Procedures, Industry and/or Government Guidelines. The Product Grades Below Are Eligible To Be Received With A Certificate of Batch or Individual Cylinder Analysis Upon Request.

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

	Industrial <sup>4</sup>	Zero <sup>3,4</sup>	High Purity <sup>5</sup>
<b>Minimum Purity:</b>	99.95	99.995	99.999
<b>Carbon Dioxide:</b>	≤ 10 ppm	Sum ≤ 1.0 ppm	Sum ≤ 1.0 ppm
<b>Carbon Monoxide:</b>	≤ 10 ppm		
<b>Nitrogen:</b>	≤ 400 ppm	≤ 5.0 ppm	≤ 4.0 ppm
<b>Oxygen <sup>2</sup>:</b>	≤ 10 ppm	≤ 5.0 ppm	≤ 1.0 ppm
<b>Odor:</b>	NT	NT	NT
<b>Total Hydrocarbon <sup>2</sup>:</b>	≤ 10 ppm	≤ 0.5 ppm	≤ 1.0 ppm
<b>Moisture <sup>2</sup>:</b>	≤ 34 ppm	≤ 8.0 ppm	≤ 3.0 ppm
<b>Dew Point:</b>	-60°F	-92°F	-96°F
<b>Boiling Point</b>	-432°F	-432°F	-432°F
<b>CGA Connection:</b>	350	350	350
<b>Lot Label Tracking <sup>4,5</sup>:</b>	No	Yes	Yes
<b>TECHNICAL</b>			
<b>UN ID:</b>	1049	<b>Molecular Weight:</b>	2.016 g/mol
<b>DOT Classification:</b>	2.1 Flammable Gas	<b>Specific Volume:</b>	192 cf/lb
<b>DOT Ship Name:</b>	Hydrogen, Compressed	<b>CAS NO:</b>	1333-74-0

**Notes:**

1. NT – Not Tested
2. Certificate of Analysis Specification Results Available Upon Request
3. Zero Grade Refers to Total Hydrocarbon Less Than 5 ppm
4. Meets MIL-BB-H-886E Specification Grade A
5. Meets MIL-BB-H-886E Specification Grade B and C