

**Safety Data Sheet
Calibration Gas Mixture: H2**
Section 1. Identification

Product identifier used on the label: Calibration Gas Mixture, H2
 Other means of identification: Part # RBxxL-H2/xxxx
 Product use: Calibration Standard
 Supplier's details: Calibration Technologies, Inc.
 920 N Trade Winds Parkway Columbia, MO 65240 1-866-394-5861
 1-800-535-5053
 Emergency telephone: 1-800-535-5053

Section 2. Hazards Identification

Classification: Compressed Gas
 GHS label Elements
 Signal word: Warning
 Hazard statements: Compressed gas under pressure. May explode if heated
 Hazard pictograms:



Storage: Protect from sunlight. Store in a well ventilated place
 Precautionary statement: Use valve rated for cylinder pressure.

Section 3. Composition/Information on ingredients

Substance/mixture: Mixture

| Ingredient name | % | CAS number |
|-----------------|------------|------------|
| Nitrogen | 76.25-80.5 | 7727-37-9 |
| Oxygen | 19.5-23.5 | 7782-44-7 |
| Hydrogen | .1-2.0 | 1333-74-0 |

Section 4. First-aid measures

Description of necessary measures subdivided below:
 Inhalation: Immediately remove victim to fresh air.
 Eye Contact: Immediately flush with copious amounts of water for 15 minutes.
 Skin Contact: N/Ap
 Ingestion: N/Ap
 Most important symptoms/effects: N/Ap
 Immediate attention/special treatment needed: N/Ap

Section 5. Fire-fighting measures

Suitable extinguishing media: All
 Unsuitable extinguishing media: None
 Specific hazards arising from the chemical: N/Ap
 Special protective equipment/precautions for fire-fighters: Contains gas under pressure. If heated, pressure will increase and cylinder may burst.

Section 6. Accidental release measures

Personal precautions, protective equipment, emergency procedures: Ventilate area, shut off valve, and remove from heat.
 Methods and materials for containment/cleaning up: N/Ap

Section 7. Handling and storage

Precautions for safe handling: Use valve rated for cylinder pressure. Avoid breathing gas. Avoid contact with eyes
 Conditions for safe storage, including any incompatibilities: Store in well ventilated area. Protect from elevated temperatures.

Section 8. Exposure controls/Personal protection

Control parameters/Occupation exposure limits:

| Ingredient name | Exposure limits |
|-----------------|------------------|
| Hydrogen | OSHA PEL N/Ap |

Eye/Face protection: Safety glasses
 Skin protection: N/Ap
 Respiratory Protection: Avoid breathing gas
 Other protective equipment: N/Ap

Section 9. Physical and chemical properties

Appearance (physical state, color, etc): Colorless
 Odor: Slightly pungent
 Odor threshold: N/Ap
 pH: N/Ap
 Melting point/freezing point: N/Ap
 Initial boiling point and boiling range: N/Ap
 Flash Point: N/Ap
 Evaporation rate: N/Ap
 Flammability (solid, gas): Not Flammable
 Upper/lower flammability or explosive limits: N/Ap
 Vapor pressure: N/Ap
 Vapor density: 1

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| Relative density: | N/Ap |
| Solubility (ies): | N/Ap |
| Partition coefficient: n-octanol/water: | N/Ap |
| Auto-ignition temperature: | N/Ap |
| Decomposition temperature: | N/Ap |
| Viscosity: | N/Ap |

Section 10. Stability and reactivity

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| Reactivity: | N/Ap |
| Chemical stability: | Stable |
| Possibility of hazardous reactions: | N/Ap |
| Conditions to avoid: | N/Ap |
| Incompatible materials: | N/Ap |
| Hazardous decomposition products: | N/Ap |

Section 11. Toxicological information

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| Lethal concentration (LC50): | >15,000 ppm (H2 ingredient) Rat 1 hr |
| Lethal dose 50 (LD50): | N/Ap |
| Teratogenicity: | N/Ap |
| Reproductive effects: | N/Ap |
| Mutagenicity: | N/Ap |

Section 12. Ecological information

No adverse ecological effects are expected.

Section 13. Disposal considerations

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| Waste disposal method: | Non-refillable cylinder. Allow gas to vent slowly to atmosphere in an unconfined area until completely empty. Dispose of empty cylinder normally. |
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Section 14. Transport information

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| UN Number: | 1956 |
| UN proper shipping name: | Compressed gases, n.o.s |
| Transport hazard class: | 2.2 (nonflammable) |
| Identification number: | UN1956 |
| Packing group: | II |
| Environmental hazards: | N/Ap |
| Transport in bulk: | N/Ap |
| Special precautions: | Must be shipped as Hazardous Materials. |

Section 15. Regulatory information

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| Safety, health and environmental regulations specific for the product in question: | N/Ap |
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Section 16. Other information

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| Date of preparation/last revision: | 6/4/2015 |
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