Safety Data Sheet
Calibration Gas Mixture: R134a

Section 1. Identification
Product identifier used on the label: Calibration Gas Mixture, R134a
Other means of identification: Part # RBxxL-R134a/xxxx
Product use: Calibration Standard
Supplier’s details: Calibration Technologies, Inc.
920 N Trade Winds Parkway Columbia, MO 65240 1-866-394-5861
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

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nitrogen</td>
<td>76.25-80.5</td>
<td>7727-37-9</td>
</tr>
<tr>
<td>Oxygen</td>
<td>19.5-23.5</td>
<td>7782-44-7</td>
</tr>
<tr>
<td>Tetrafluoroethane</td>
<td>0.05-0.30</td>
<td>811-97-2</td>
</tr>
</tbody>
</table>

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:

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tetrafluoroethane</td>
<td>AIHA TWA: 1000ppm 10 hours</td>
</tr>
</tbody>
</table>

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

Section 10. Stability and reactivity
Reactivity: N/A 
Chemical stability: Stable 
Possibility of hazardous reactions: N/A 
Conditions to avoid: N/A 
Incompatible materials: N/A 
Hazardous decomposition products: N/A 

Section 11. Toxicological information
Lethal concentration (LC50): >500,000ppm (R134a ingredient), Rat 4hrs 
Lethal dose 50 (LD50): N/A 
Teratogenicity: N/A 
Reproductive effects: N/A 
Mutagenicity: N/A 

Section 12. Ecological information
No adverse ecological effects are expected. 

Section 13. Disposal considerations

Section 14. Transport information
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/A 
Transport in bulk: N/A 
Special precautions: Must be shipped as Hazardous Materials. 

Section 15. Regulatory information
Safety, health and environmental regulations specific for the product in question: N/A 

Section 16. Other information
Date of preparation/last revision: 6/4/2015