

**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  
 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
Tetrafluoroethane	0.05-0.30	811-97-2

**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
Tetrafluoroethane	AIHA TWA: 1000ppm 10 hours

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/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

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

Lethal concentration (LC50):	>500,000ppm (R134a ingredient), Rat 4hrs
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

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

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

Safety, health and environmental regulations specific for the product in question:

N/Ap

#### Section 16. Other information

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