



## ELECTRO-TECHNIC PRODUCTS

4642 N. RAVENSWOOD, CHICAGO, ILLINOIS 60640-4510

TELEPHONE: 1-773-561-2349

### SAFETY DATA SHEET

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#### Section 1: Identification

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**Product Identifier:** Spectrum Tube, Carbon Dioxide (ETP Product No. 21302)

**Common Name:** Carbon Dioxide Gas, Carbonic Acid Gas

**Recommended Use:** Educational, study of spectral lines

**Restrictions on Use:** Use under supervision of science teacher

#### Manufacturer Information

Electro-Technic Products  
4642 N. Ravenswood Ave  
Chicago, IL 60640-4510, USA

#### General and Emergency Phone No.

773-561-2349

#### Revision Date:

06/01/15

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#### Section 2: Hazards Identification

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**Hazard Classification:** Gas under very low pressure

**General Statement:** The amount of carbon dioxide gas contained in each tube is much less than 1% by volume; does not present hazard if tube is accidentally broken.

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#### Section 3: Composition / Information on Ingredients

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**CAS:** 124-38-9

**Component:** Carbon Dioxide

**Percent:** 100%, very low concentration by volume

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#### Section 4: First-Aid Measures

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**Description of Necessary Measures:** No information regarding necessary measures due to very low concentrations of gas contained in each tube. If tube broken, treat for cuts and possible burns resulting from tube if hot.

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#### Section 5: Fire-Fighting Measures

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**Recommendations for fighting fire caused by the chemical:** Due to the very low concentration of gas contained in each tube, it is not likely that the release of the chemical will cause a fire, nor will release during a fire require any special fire-fighting measures, as carbon dioxide is a negligible fire hazard.

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#### Section 6: Accidental Release Measures

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#### Recommendations for Personal Precautions and Emergency Procedures:

None required.

**Methods and Material Used to Containment and Clean Up:** Dispose of any broken glass properly.

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**Section 7: Handling and Storage**

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**Precautions for Safe Handling:** Never handle tube when hot, or energized. Keep away from heat, use indoors, with approved source of power.

**Conditions for Safe Storage:** Store at room temperature. Protect glass from breakage.

**Incompatibilities While Storing:** Keep away from any chemical that might attack glass.

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**Section 8: Exposure Controls / Personal Protection**

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**Component Exposure Limits:** Use in an area providing normal ventilation. Never use in a confined space

**Personal Protection:** Wear safety glasses when using this product. Observe normal normal laboratory procedures.

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**Section 9: Physical and Chemical Properties**

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<b>Physical State:</b> colorless, odorless gas	<b>Melting/Freezing Point:</b> -57 °C @ 4000 mmHg
<b>Vapor Pressure:</b> 43700 mmHg @ 21 °C	<b>Vapor Density (air=1)</b> 1.5
<b>Specific Gravity (water=1):</b> 1.527 @ 21 °C	<b>Boiling Point:</b> -78.5 °C (sublimation)
<b>Molecular Weight:</b> 44.01	<b>Molecular Formula:</b> CO <sub>2</sub>

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**Section 10: Stability and Reactivity**

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**Reactivity:** None expected.

**Chemical Stability:** Stable. Present at very low pressures.

**Conditions to Avoid:** Avoid open flames, mechanical stress on glass

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**Section 11: Toxicological Information**

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No such data is available for the very low concentrations of this chemical in each tube.

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**Sections 12: Ecological Information** No data available

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**Section 13: Disposal Considerations**

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**Disposal Methods:** Dispose of in accordance with all applicable local regulations.

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**Sections 14/15: Transport and Regulatory Information** Not applicable

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**Section 16: Other Information**

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