



ELECTRO-TECHNIC PRODUCTS

4642 N. RAVENSWOOD, CHICAGO, ILLINOIS 60640-4510

TELEPHONE: 1-773-561-2349

SAFETY DATA SHEET

Section 1: Identification

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

Section 2: Hazards Identification

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.

Section 3: Composition / Information on Ingredients

CAS: 124-38-9

Component: Carbon Dioxide

Percent: 100%, very low concentration by volume

Section 4: First-Aid Measures

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.

Section 5: Fire-Fighting Measures

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.

Section 6: Accidental Release Measures

Recommendations for Personal Precautions and Emergency Procedures:

None required.

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

Section 7: Handling and Storage

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.

Section 8: Exposure Controls / Personal Protection

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.

Section 9: Physical and Chemical Properties

Physical State: colorless, odorless gas

Vapor Pressure: 43700 mmHg @ 21 °C

Specific Gravity (water=1): 1.527 @ 21 °C

Molecular Weight: 44.01

Melting/Freezing Point: -57 °C @ 4000 mmHg

Vapor Density (air=1) 1.5

Boiling Point: -78.5 °C (sublimation)

Molecular Formula: CO₂

Section 10: Stability and Reactivity

Reactivity: None expected.

Chemical Stability: Stable. Present at very low pressures.

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

Section 11: Toxicological Information

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

Sections 12: Ecological Information No data available

Section 13: Disposal Considerations

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

Sections 14/15: Transport and Regulatory Information Not applicable

Section 16: Other Information

The above information is based upon the best information available to us. Electro-Technic Products shall not be held liable for any claims, losses or damages resulting from reliance on this information. Users should do their own research to determine the suitability of the information for their own use of this product.