



## ELECTRO-TECHNIC PRODUCTS

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TELEPHONE: 1-773-561-2349

### SAFETY DATA SHEET

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#### Section 1: Identification

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**Product Identifier:** Spectrum Tube, Deuterium (ETP Product No. 21702)

**Common Name:** Deuterium 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:

06/01/2015

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#### Section 2: Hazards Identification

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**Hazard Classification:** Flammable Gas

**General Statement:** The amount of deuterium 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:** 7782-39-0 **Component:** Deuterium

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

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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.

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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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**Physical State:** colorless, odorless gas

**Vapor Pressure:** 17.14 kPa

**Specific Gravity (water=1):** 0.169 @ -253 °C

**Molecular Weight:** 4.028

**Boiling Point:** -254 °C

**Vapor Density (air=1):** 0.1

**Auto Ignition:** 585 °C

**Molecular Formula:** D2

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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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