SAFETY DATA SHEET

ELUTING SOLUTION



Section 1: Identification

Product Name: Eluting Solution

Catalog Number: ELSN

Usage: Used to extract Ba-137m from a Cs-137/Ba-137m

Isotope Generator.

Synonyms: Hydrochloric acid in water; 0.9% NaCl in 0.04

In 250 ml of H₂0

Chemical Name: Not applicable

Chemical Formula: Not applicable **Company Information:**

Spectrum Techniques, LLC 106 Union Valley Road

Oak Ridge, TN 37830

Company Phone Number: 865-482-9937 **Emergency Phone Number:** 865-482-9937

Website: www.spectrumtechniques.com

Section 2: Hazard(s) Identification

Potential Acute Health Effects: Not applicable **Potential Chronic Health Effects:** Not applicable

Section 3: Composition/Information on Ingredients

CAS#	EC Number	Chemical Name	Percent
7647-01-0	231-595-7	Hydrogen Chloride	0.04
7440-23-5	231-598-3	Sodium Chloride	0.9
7732-18-5	231-791-2	Water	250 ml

Section 4: First-Aid Measures

Flush eyes with plenty of water for 15 minutes, occasionally lifting the upper and lower eyelids. Eyes:

Skin: Not applicable **Ingestion:** Not applicable **Inhalation:** Not applicable

Notes to Physician: Not applicable

Antidote: Not applicable

Section 5: Fire-Fighting Measures

Fire: Not applicable Not considered to be an explosion hazard **Explosion:**

Fire Extinguishing Mode: Not applicable **Flash Point:** Not applicable

Autoignition Temperature: Not applicable

Explosion Limits, Lower: Not available Health: 0; Flammability: 0; Instability: 0 **NFPA Rating:**

Explosion Limits, Upper: Not available

Section 6: Accidental Release Measures

General Information: Not applicable

Spills/Leaks: Remove liquid with absorbent material and dispose of with solid waste.

Section 7: Handling and Storage

Handling: No special handling instructions. **Storage:** No special storage instructions.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Not applicable
Exposure Limits: Not applicable
Personal Protective Equipment
Eyes: Not applicable

Skin: Not applicable **Clothing:** Not applicable

Section 9: Physical and Chemical Properties

Physical State: Liquid Viscosity: Not applicable

Appearance: Clear, colorless liquid Boiling Point: Not applicable

Odor: Not applicable **Freezing/Melting Point:** Essentially the same as water.

pH: 2 Oxidizing Properties: Not an oxidizer

Vapor Pressure: Not applicable **Solubility:** Soluble

Vapor Density: Not applicable Specific Gravity/Density: 1.1

Evaporation Rate: Essentially the same as water.

Section 10: Stability and Reactivity

Chemical Stability: Stable under normal temperatures and pressures.

Conditions to Avoid: Not applicable

Incompatibilities with other materials: Not incompatible with other materials

Hazardous Decomposition Products: Not applicable

Hazardous Polymerization: Will not occur.

Section 11: Toxicological Information

Radiological: Not applicable
Chemical: Not applicable
Carcinogenicity: Not applicable
Epidemiology: Not applicable
Teratogenicity: Not applicable
Reproductive Effects: Not applicable
Mutagenicity: Not applicable
Neurotoxicity: Not applicable

Symptoms related to the Physical, Chemical, and Toxicological Characteristics: Not applicable

Section 12: Ecological Information

Ecotoxicity: Not available

Persistence and Degradability: Biodegradable

Bioaccumulative Potential: Hydrochloric acid does not bioconcentrate.

Mobility in soil: When released into soil, this material my leach into groundwater.

Section 13: Disposal Considerations

RCRA P-Series: None listed RCRA U-Series: None listed

Section 14: Transport Information

Note applicable

Section 15: Regulatory Information

US Federal

Not applicable

European/International

Not applicable