



ELECTRO-TECHNIC PRODUCTS INC.

4642 N. RAVENSWOOD, CHICAGO, ILLINOIS 60640-4510

PHONE: (773) 561-2349 • FAX: (773) 561-3130

MATERIAL SAFETY DATA SHEET

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

SECTION I

MANUFACTURER: Electro-Technic Products, Inc.	EMERGENCY TELEPHONE NUMBER 773-561-2349
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ADDRESS 4642 N. Ravenswood Ave. Chicago, IL 60640-4510	TELEPHONE FOR INFORMATION 773-561-2349
	FAX NUMBER FOR INFORMATION 773-561-3130

DATE PREPARED	September 22, 2004
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SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT	OSHA TWA	ACGIH TWA	OTHER LIMITS	% (OPT)
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Deuterium(2H ₂)	None established			
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SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT (deg C) - 249.5 °C	SPECIFIC VOLUME (@ 1 ATM, 21.1 °C) 5.987 m ³ /kg
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VAPOR PRESSURE (Torr) Not applicable	MELTING POINT (deg C) Not available
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VAPOR DENSITY (AIR=1) 0.139 @ 1 ATM, 21.1°C	EVAPORATION RATE (BUTYL ACETATE=1) Not applicable
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SOLUBILITY IN WATER Not available	APPEARANCE AND ODOR Colorless, odorless gas
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SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED) Auto Ignition 571.2 °C	FLAMMABLE LIMITS LEL 5 - 75% by volume	UEL
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EXTINGUISHING MEDIA	Stop flow of gas
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SPECIAL FIRE FIGHTING PROCEDURES	None
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UNUSUAL FIRE AND EXPLOSION HAZARDS None, at small concentrations of gas inside of tube

MSDS Part Number 085-0127-2



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SECTION V - REACTIVITY DATA

Spectrum Tube, Deuterium

STABLE (Y/N) Y CONDITIONS TO AVOID Oxidizing agents

INCOMPATIBILITY (MATERIALS TO AVOID) Avoid oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS None

HAZARDOUS POLYMERIZATION (Y/N) N CONDITIONS TO AVOID None

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY	INHALATION?	SKIN?	INGESTION?
	Yes	No	No

HEALTH HAZARDS (ACUTE AND CHRONIC) None

CARCINOGENICITY	NTP	IARC MONOGRAPHS	OHSA REGULATED
No	No	No	No

SIGNS AND SYMPTOMS OF EXPOSURE None

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE None

EMERGENCY AND FIRST AID PROCEDURES None

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
Clean up broken glass

WASTE DISPOSAL METHOD Standard

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
Sharp glass fragments

OTHER PRECAUTIONS None

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION (TYPE) None

VENTILATION:	LOCAL EXHAUST	SPECIAL	
	MECHANICAL	OTHER	None
	No		

PROTECTIVE GLOVES No EYE PROTECTION Safety goggles

OTHER PROTECTIVE EQUIPMENT None

WORK/HYGIENIC PRACTICES Normal laboratory procedures