SE-9461

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, Hydrogen (ETP Product No. 20502)**

SECTION I

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

DATE PREPARED **September 19, 2006**

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT	OSHA TWA	ACGIH TWA	OTHER LIMITS	%	(OPT)
Hydrogen (H_2)	**None established**				

SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

BOILING POINT (deg C) **- 252.8 °C**	SPECIFIC VOLUME (@ 1 ATM, 21.1 °C) **11.967 m^3/kg**
VAPOR PRESSURE (Torr) **Not applicable**	MELTING POINT (deg C) **Not applicable**
VAPOR DENSITY (AIR=1) **0.0695 @ 1 ATM, 25 °C**	EVAPORATION RATE (BUTYL ACETATE=1) **Not applicable**
SOLUBILITY IN WATER **18.02 cm^3/kg water, 1 ATM, 20°C**	APPEARANCE AND ODOR **Colorless, odorless gas**

SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED) **Auto Ignition 571.2 °C**	FLAMMABLE LIMITS LEL UEL **4 - 75% by volume**
EXTINGUISHING MEDIA	**Stop flow of gas**
SPECIAL FIRE FIGHTING PROCEDURES	**None**
UNUSUAL FIRE AND EXPLOSION HAZARDS	**None, at small concentrations of hydrogen gas inside of tube**

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SECTION V - REACTIVITY DATA **Spectrum Tube, Hydrogen**

STABLE (Y/N) **Y**	CONDITIONS TO AVOID **Oxidizing agents**
INCOMPATIBILITY (MATERIALS TO 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 V11 - 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 **None**	OTHER **None**	

PROTECTIVE GLOVES **No** EYE PROTECTION **Safety goggles**

OTHER PROTECTIVE EQUIPMENT **None**

WORK/HYGIENIC PRACTICES **Normal laboratory procedures**