



**ELECTRO-TECHNIC PRODUCTS INC.**

4642 N. RAVENSWOOD, CHICAGO, ILLINOIS 60640-4510

TELEPHONE: 1-773-561-2349

FAX: 1-773-561-3130

**MATERIAL SAFETY DATA SHEET**

**IDENTITY: Spectrum Tube, Hydrogen (ETP Product No. 20502)**

**SECTION I**

<b>MANUFACTURER:</b> <b>Electro-Technic Products, Inc.</b>	<b>EMERGENCY TELEPHONE NUMBER</b> <b>773-561-2349</b>
<b>ADDRESS</b> <b>4642 N. Ravenswood Ave</b> <b>Chicago, IL 60640-4510</b>	<b>TELEPHONE FOR INFORMATION</b> <b>773-561-2349</b> <b>FAX NUMBER FOR INFORMATION</b> <b>773-561-3130</b>
<b>DATE PREPARED</b>	<b>August 1, 2012</b>

**SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION**

<b>HAZARDOUS COMPONENT</b>	<b>OSHA TWA</b>	<b>ACGIH TWA</b>	<b>OTHER LIMITS %</b>	<b>(OPT)</b>
<b>Hydrogen (H<sub>2</sub>)</b>	<b>None established</b>			

**SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS**

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

**SECTION IV - FIRE AND EXPLOSION DATA**

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

---

---

**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

**Yes**

INHALATION?

**No****No**

SKIN?

INGESTION?

HEALTH HAZARDS (ACUTE AND CHRONIC)

**None**

CARCINOGENICITY

**No**

NTP

**No**

IARC MONOGRAPHS

**No**

OHSA REGULATED

**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:

MECHANICAL

**None**

LOCAL EXHAUST

OTHER

**None**

SPECIAL

PROTECTIVE GLOVES **No**

EYE PROTECTION

**Safety goggles**

OTHER PROTECTIVE EQUIPMENT

**None**

WORK/HYGIENIC PRACTICES

**Normal laboratory procedures**

*Leak Testers, Corona Treaters, Science Education Products*

**web site:** [www.electrotechnicproduct.com](http://www.electrotechnicproduct.com)

**e-mail:** [sales@electrotechnicproduct.com](mailto:sales@electrotechnicproduct.com)