

# SE-9464

## MATERIAL SAFETY DATA SHEET

IDENTITY: Spectrum Tube, Carbon Dioxide (ETP Product No. 21302)

### SECTION I

MANUFACTURER: Electro-Technic Products, Inc.	EMERGENCY TELEPHONE NUMBER 312-561-2349
ADDRESS 4642 N. Ravenswood Ave. Chicago, IL 60640-4592	TELEPHONE FOR INFORMATION 312-561-2349
	FAX NUMBER FOR INFORMATION 312-561-3130

DATE PREPARED August 7, 1989

### SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS COMPONENT	OSHA TWA	ACGIH TLV	OTHER LIMITS	% (OPT)
None	5,000 ppm	5,000 ppm	15,000 ppm (ACGIH STEL)	

### SECTION III - PHYSICAL AND CHEMICAL CHARACTERISTICS

SUBLIMATION POINT (° C) -78.4 °C	SPECIFIC VOLUME (1 ATM, 21.1 °C) 0.547 m <sup>3</sup> /kg
VAPOR PRESSURE (kPa) 5,727 kPa (gauge)	MELTING POINT (deg C) Does not apply
VAPOR DENSITY (AIR=1) 1.53 @ 1 ATM, 0 °C	EVAPORATION RATE (BUTYL ACETATE=1) Does not apply
SOLUBILITY IN WATER 7.59 cm <sup>3</sup> /kg @ 1 ATM, 0 °C	APPEARANCE AND ODOR Colorless, odorless gas

### SECTION IV - FIRE AND EXPLOSION DATA

FLASH POINT (METHOD USED) Does not apply	FLAMMABLE LIMITS Nonflammable	LEL	UEL
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EXTINGUISHING MEDIA Does not apply

SPECIAL FIRE FIGHTING PROCEDURES None

UNUSUAL FIRE AND EXPLOSION HAZARDS None

MSDS Part Number: 085-0123-2

SECTION V - REACTIVITY DATA      **Spectrum Tube, Carbon Dioxide**

STABLE (Y/N)    **Y**    CONDITIONS TO AVOID    **None**

INCOMPATIBILITY (MATERIALS TO AVOID)    **None**

HAZARDOUS DECOMPOSITION PRODUCTS    **With reactive metals, and their hydrides**

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

SECTION VI - HEALTH HAZARD DATA

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

HEALTH HAZARDS (ACUTE AND CHRONIC)    **None**

CARCINOGENICITY      NTP      IARC MONOGRAPHS      OSHA REGULATED  
                                 **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    **None**                      OTHER

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

OTHER PROTECTIVE EQUIPMENT    **None**

WORK/HYGIENIC PRACTICES    **Normal laboratory procedures**