Technical Information
Material Safety Data Sheet

SDT-14R_02E

SECTION 1	CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
MANUFACTURE'S NAME	**TELEPHONE NUMBER**	**FACSIMILE NUMBER**
GASTEC CORPORATION	+81-467-79-3910	+81-467-79-3979

ADDRESS
8-8-6 Fukayanaka, Ayase-City, Kanagawa 252-1195, Japan

REFERENCE NUMBER	DATE PREPARED
SDT-14R_02E	May 31, 2006

PRODUCT NAME	Gas Detector Tube Hydrogen Chloride Tube No.14R

SECTION 2	COMPOSITION/INFORMATION ON INGREDIENTS
	Porous Silica Gel (0.3 g) impregnated with Polyhydric Alcohol (<5-10%) and Barium Compounds (<5%) in a glass tube.

SECTION 3	HAZARDOUS IDENTIFICATION
	Not applicable

SECTION 4	FIRST AID MEASURES
Eye contact:	Wash eyes immediately with plenty of water for at least 15 minutes and see a doctor.
Skin contact:	Wash affected area immediately with soap and plenty of water.
Inhalation:	Not applicable
Ingestion:	Rinse mouth immediately and see a doctor.

SECTION 5	FIRE FIGHTING MEASURES
	None

SECTION 6	ACCIDENTAL RELEASE MEASURES
	Not applicable

SECTION 7	HANDLING AND STORAGE
	When breaking off the tube ends, keep away from eyes. Broken glass tubes should not be picked up with bare hands. Tubes should be stored in a cool and dark place.

SECTION 8	EXPOSURE PROTECTION
	Not applicable

SECTION 9	PHYSICAL AND CHEMICAL PROPERTIES
Polyhydric Alcohol:	
Flash point:	116℃ (tag sealing)
Autoignition point:	402℃
Barium Compounds	
Flash point:	Not available
Autoignition point:	Not available

SECTION 10	STABILITY AND REACTIVITY
Polyhydric Alcohol:	
Stability:	Stable. Hygroscopic
Reactivity:	May cause explosion in contact with oxidant.
Condition to avoid:	Sunlight, Heat, Open flames, High temperature, Sparks, Static charge, Other ignition sources
Hazardous decomposition product:	Carbon monoxide may be formed.
Barium compounds:	
Stability:	Stable.
Reactivity:	Contact with acid or heat to form toxic hydrogen chloride. React with sulfate to form water-insoluble Barium Sulfate.
Condition to avoid:	Sunlight, Heat
Hazardous decomposition product:	Carbon monoxide, barium compounds or halides may be formed.

SECTION 11	TOXICOLOGICAL INFORMATION
Polyhydric Alcohol:	
Acute toxicity data:	TCL0: (ihl, human): 10000mg/m^3; watering eye, cough, breathing problem LD50: (orl, rat): 4700mg/kg LD50: (sc, rat): 2800mg/kg LD50: (skn, rabbit): 9530mg/kg
Irritation data:	Skin; rabbit; 555mg; open system; minor Eye; rabbit; 100mg/lh; minor
Mutagenicity:	DNA; inhibition; human; lymphocyte; 320mmol/L
Teratogenicity:	TDL0: (orl, mouse): 7500mg/kg; (6-15 D preg) embryotoxicity; abnormal musculoskeletal
Carcinogen:	OSHA: Not listed NTP: Not listed IARC: Not listed
Barium compounds	
Acute toxicity data:	LD50: (orl, rat): 118mg/kg (RTECS) LDLo: (iv, rat): 20mg/kg (RTECS) LD50: (orl, mouse): 150mg/kg (RTECS) LD50: (ip, mouse): 56.2mg/kg (RTECS) LD50: (iv, mouse): 21mg/kg (RTECS) LD50: (orl, rabbit): 236mg/kg (RTECS) LDLo: (skn, rabbit): 96mg/kg (RTECS) LDLo: (iv, rabbit): 12mg/kg (RTECS)
Irritation data:	Not available
Chronic toxicity / Long –term toxicity:	Barium ion irritate to all muscles continuously may cause aberrant muscle contraction or cardiac arrest also cause vomiting, diarrhea and irritate to spinal chord.
Mutagenicity:	Not available
Carcinogen:	Not available

SECTION 12	ECOLOGICAL INFORMATION
	Not available

SECTION 13	DISPOSAL CONSIDERATION
	This tube does not contain any hazardous materials. Dispose of in accordance with all applicable laws and regulations. (Contact local environmental agency for specific rules.)

SECTION 14	TRANSPORT INFORMATION
	Breakage of tubes caused by drops, high pressure or bends should be avoided.

SECTION 15	REGULATORY INFORMATION
	Not applicable

SECTION 16	OTHER INFORMATION
	No specific notes