

**Technical Information**  
**Material Safety Data Sheet**

SDT-22\_03E

<b>SECTION 1</b>		<b>CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>MANUFACTURE'S NAME</b>	<b>TELEPHONE NUMBER</b>	<b>FACSIMILE NUMBER</b>	
GASTEC CORPORATION	+81-467-79-3910	+81-467-79-3979	
<b>ADDRESS</b>			
6431 Fukaya, Ayase-City, Kanagawa 252-1103, Japan			
<b>REFERENCE NUMBER</b>		<b>DATE PREPARED</b>	
SDT-22_03E		September 13, 2005	
<b>PRODUCT NAME</b>	Gas Detector Tube Diborane Detector Tube No.22		
<b>SECTION 2</b>		<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>	
Porous Silica Gel (0.3 g) impregnated with Barium Perchlorate (<10%) and Mercury (II) Chloride (<1%) in a glass tube.			
<b>SECTION 3</b>		<b>HAZARDOUS IDENTIFICATION</b>	
Not applicable			
<b>SECTION 4</b>		<b>FIRST AID MEASURES</b>	
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.		
<b>SECTION 5</b>		<b>FIRE FIGHTING MEASURES</b>	
None			
<b>SECTION 6</b>		<b>ACCIDENTAL RELEASE MEASURES</b>	
Not applicable			
<b>SECTION 7</b>		<b>HANDLING AND STORAGE</b>	
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.			
<b>SECTION 8</b>		<b>EXPOSURE PROTECTION</b>	
Not applicable			
<b>SECTION 9</b>		<b>PHYSICAL AND CHEMICAL PROPERTIES</b>	
Mercury (II) Chloride/ Barium Perchlorate:			
Flash point:	Not available		
Autoignition point:	Not available		

<b>SECTION 10</b>	<b>STABILITY AND REACTIVITY</b>
Mercury (II) Chloride:	
Stability:	Stable for heat and light.
Reactivity:	Not available
Condition to avoid:	Sunlight, Heat
Hazardous decomposition product:	Mercury oxide or chloride may be formed.
Barium Perchlorate:	
Stability:	Stable
Reactivity:	Contact with organic agents may cause fire. React violently with water or acid to evolve heat and form hydrogen peroxide or Barium Oxide.
Condition to avoid:	Sunlight, Heat, Pressure, Flames, High temperature, Friction, Sparks, Static charge,
Hazardous decomposition product:	Oxides of Barium or Chloride Compounds may be formed.
<b>SECTION 11</b>	<b>TOXICOLOGICAL INFORMATION</b>
Mercury(II) Chloride:	
Acute toxicity data:	LCL0: (ihl, human): 300mg/m <sup>3</sup> /10 min. LD50: (orl, rat): 1mg/kg LDL0: (iv, dog): 2710 $\mu$ g/kg LD50: (ip, mouse): 7165 $\mu$ g/kg
Irritation data:	Skin; rabbit; 500mg/24h; severe Eye; rabbit; 50mg/24h; severe
Mutagenicity:	Chromosomal aberration test; hamster; wbc: 50 $\mu$ mol/L DNA; damage; hamster; ovarian: 2500nmol/L DNA; inhibition; mouse; wbc: 100nmol/L dominant lethal gene test:: rat; orl: 250mg/kg
Carcinogen:	Not available
Barium Perchlorate:	
Acute toxicity data:	Not available
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:	As soluble barium compound(ACGIH:4 Not Classifiable as a human Carcinogen)
<b>SECTION 12</b>	<b>ECOLOGICAL INFORMATION</b>
	Not available
<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATION</b>
	This tube contains 0.42mg of inorganic mercury. Dispose of in accordance with all applicable laws and regulations. (Contact local environmental agency for specific rules.)
<b>SECTION 14</b>	<b>TRANSPORT INFORMATION</b>
	Breakage of tubes caused by drops, high pressure or bends should be avoided.

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<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b>
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Not applicable

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<b>SECTION 16</b>	<b>OTHER INFORMATION</b>
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No specific notes