

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

SDT-26\_03E

<b>SECTION 1</b>		<b>CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>MANUFACTURE'S NAME</b> GASTEC CORPORATION	<b>TELEPHONE NUMBER</b> +81-467-79-3910	<b>FACSIMILE NUMBER</b> +81-467-79-3979	
<b>ADDRESS</b> 6431 Fukaya, Ayase-City, Kanagawa 252-1103, Japan			
<b>REFERENCE NUMBER</b> SDT-26_03E	<b>DATE PREPARED</b> September 14, 2005		
<b>PRODUCT NAME</b>	Gas Detector Tube Polytec III Unknown Gas Detector Tube No. 26		
<b>SECTION 2</b>		<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>	
		Porous Silica Gel (0.6g) impregnated with Sulfuric Acid (5%), Mercury (II) Chloride (<0.1%) and Potassium Dichromate(<5%) 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>	
Sulfuric acid, Mercury (II) Chloride and Potassium Dichromate:			
Flash point:	Not available		
Autoignition point:	Not available		
<b>SECTION 10</b>		<b>STABILITY AND REACTIVITY</b>	
Potassium Dichromate:			
Stability:	The substance is a strong oxidant. A mixture of the substance and combustibles is easy to ignite.		

Reactivity: Not available  
Condition to avoid: Sunlight, Heat  
Hazardous decomposition product: chromium may be formed

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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.

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Sulfuric acid:  
Stability: Stable. Absorb moisture powerfully from the air.  
Reactivity: React violently with water to evolve heat and may spatter. Bite into metals and concrete caused by oxidation. Carbonize to flammable organic materials.  
Condition to avoid: Sunlight, Heat, Moisture  
Material to avoid: Organic materials, Reducing agents, Metals  
Hazardous decomposition product: Sulfur oxides may be formed

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## SECTION 11 TOXICOLOGICAL INFORMATION

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Potassium Dichromate:  
Acute toxicity data: LD50 (orl, rat): 25mg/kg(RTECS)  
LD50 (ip, rat): 18mg/kg(RTECS)  
LD50 (orl, mouse): 190mg/kg(RTECS)  
LD50 (ip, mouse): 37mg/kg(RTECS)  
LDLo (sc, mouse): 100mg/kg(RTECS)  
Irritation data: Corrosiveness damages skin and membrane of nose, throat and bronchus.  
Sensitization: Japan Society for Occupational Health:  
Airway sensitizing substance Group 2 (Probably human sensitizing)  
Skin sensitizing substance Group 1 (Clearly human sensitizing)  
(Advice of occupational exposure limits)  
Mutagenicity: Not available  
Carcinogen: As Hexavalent chromium;  
NTP: K (Prospective human carcinogen)  
IARC: Group 1 (Human carcinogen)  
ACGIH: A1 (Known to be carcinogen)  
Japan Society for Occupational Health: Group 1 (Human carcinogen)

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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 μ g/kg  
LD50: (ip, mouse): 7165 μ g/kg  
Irritation data: Skin; rabbit; 500mg/24h; severe  
Eye; rabbit; 50mg/24h; severe  
Mutagenicity: Chromosomal aberration test; hamster; wbc: 50 μ 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

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Sulfuric acid:  
Acute toxicity data: LD50 (orl, rat): 2140mg/kg  
LC50 (ihl, cavy): 18mg/m<sup>3</sup>  
Irritation data: Eye; rabbit; 1380 μ g; severe  
Mutagenicity: Not available  
Carcinogen: Not available

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## SECTION 12 ECOLOGICAL INFORMATION

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Not available

<b>SECTION 13</b>	<b>DISPOSAL CONSIDERATION</b> This tube contains 1.77mg of Hexavalent Chromium and 0.25mg 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.
<b>SECTION 15</b>	<b>REGULATORY INFORMATION</b> Not applicable
<b>SECTION 16</b>	<b>OTHER INFORMATION</b> No specific notes