

Technical Information
Material Safety Data Sheet

SDT-121L_05E

SECTION 1		CHEMICAL PRODUCT AND COMPANY IDENTIFICATION	
MANUFACTURE'S NAME GASTEC CORPORATION	TELEPHONE NUMBER +81-467-79-3910	FACSIMILE NUMBER +81-467-79-3979	
ADDRESS 6431 Fukaya, Ayase-City, Kanagawa 252-1103, Japan			
REFERENCE NUMBER SDT-121L_05E	DATE PREPARED September 19, 2005		
PRODUCT NAME	Gas Detector Tube Benzene Detector Tube No.121L		
SECTION 2		COMPOSITION/INFORMATION ON INGREDIENTS	
Pretreatment Tube: Porous Silica Gel (0.2g) impregnated with Barium Compound (5-10%) in a glass tube. Detector Tube: Porous Silica Gel (0.5g) impregnated with Fuming Sulfuric Acid (10-15%), Sulfuric Acid (5-15%) and Chromic Anhydride (<1%) 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	
Barium Compound, Fuming sulfuric acid, and Sulfuric acid:			
Flash point:	Not available		
Autoignition point:	Not available		

SECTION 10 STABILITY AND REACTIVITY

Barium Compound:

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.

Fuming sulfuric acid:

Stability:	White smoke poisonous gas (sulfur trioxide) is emitted in air.
Reactivity:	React violently with water to evolve heat. Diluted sulfuric acid reacts with metals such as iron to form flammable hydrogen gas may cause fire and explosion. May cause ignition in contact with organic materials.
Condition to avoid:	Sunlight, Heat, Moisture
Hazardous decomposition product:	Sulfur oxides may be formed.

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

SECTION 11 TOXICOLOGICAL INFORMATION

Barium Compound:

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)

Fuming sulfuric acid:

Acute toxicity data:	LC50 (ihl, rat): 347ppm/1H (RTECS)
Irritation data:	as Sulfuric acid; Eye; rabbit; 250 μ g; severe (RTECS)
Mutagenicity:	Not available
Carcinogen:	IARC: Human carcinogen (Group 1) ACGIH: as Sulfuric acid; Suspected human carcinogen (A2)

Sulfuric acid

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

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATION

This detector tube contains 0.78 mg of hexavalent chromium.
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