

Technical Information
Material Safety Data Sheet

SDT-121S_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			
6431 Fukaya, Ayase-City, Kanagawa 252-1103, Japan			
REFERENCE NUMBER		DATE PREPARED	
SDT-121S_02E		September 16, 2005	
PRODUCT NAME		Gas Detector Tube Benzene Detector Tube No.121S	
SECTION 2		COMPOSITION/INFORMATION ON INGREDIENTS	
Pretreatment Tube: Porous Silica Gel (0.6g) impregnated with Sulfuric Acid (25-35%) and Chromic Anhydride (<5%) in a glass tube. Detector Tube: Porous Silica Gel (0.6g) impregnated with Fuming Sulfuric Acid (5-15%), Sulfuric Acid (5-10%), 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	
Fuming sulfuric acid, Chromic Anhydride, and Sulfuric acid:			
Flash point:	Not available		
Autoignition point:	Not available		

SECTION 10 STABILITY AND REACTIVITY

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.
Chromic anhydride:	
Stability:	Stable.
Reactivity:	Strong oxidizers. Contact with organic agents or metal powder may cause expose by heat or shock. Contact with organic agents may cause fire.
Condition to avoid:	Sunlight, Heat
Hazardous decomposition product:	Not available
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

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)
Chromic anhydride:	
Acute toxicity data:	LD50 (ip, rat): 58400 μ g/kg (RTECS) LD50 (iv, rat): 9260 μ g/kg (RTECS) LD50 (orl, mouse): 127mg/kg (RTECS) LD50 (ip, mouse): 14mg/kg (RTECS) LDLo (sc, mouse): 20mg/kg (RTECS) LD50 (iv, mouse): 17100 μ g/kg (RTECS)
Irritation data:	Not available
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)
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**

Fuming sulfuric acid, Sulfuric acid:

Not available

Chromic anhydride:

Biodegradability: Not available

Bioaccumulation Potential: Concentration scale factor (BCF); 4.6-15 (concentration, 100 μ g/l);

14-21 (concentration, 20 μ g/l); 11-43 (concentration 5 μ g/l); 16-72 (concentration 94-242 μ g/l)

Aquatic toxicity: LC50 (killifish): 82mg/l/48H

SECTION 13 **DISPOSAL CONSIDERATION**

This pretreatment tube contains 11.64 mg of hexavalent chromium.

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