<u>Technical Information</u> <u>Material Safety Data Sheet</u>

SECTION 1	CHEMICAL PRODUCT AND	COMPANY IDENTIFICATION	
MANUFACTURE'S NAM GASTEC CORPORATION		FACSIMILE NUMBER +81-467-79-3979	
ADDRESS 8-8-6 Fukayanaka, Ayase-City, Kanagawa 252-1195, Japan			
REFERENCE NUMBER	DATE PREPARED		
SDT-121AHS_03E	January 10, 2014		
PRODUCT NAME	Gas Detector Tube Benzene Detector Tube No.121AHS		
SECTION 2	COMPOSITION/INFORMATION ON	INGREDIENTS	
	Porous Silica Gel (0.3 g) impregna (10-15%), Sulfuric Acid (5-15%), I Chromic Anhydride (<1%) in a glass to	Barium compound (<1%), and	
SECTION 3	HAZARDOUS IDENTIFICATION		
	Not applicable		
SECTION 4	FIRST AID MEASURES		
Eye contact: Skin contact: Inhalation:	Wash eyes immediately with plenty of water for at least 15 minutes and see a doctor. Wash affected area immediately with soap and plenty of water. Not applicable		
Ingestion:	Rinse mouth immediately and see a c	doctor.	
SECTION 5	FIRE FIGHTING MEASURES		
	None		
SECTION 6	ACCIDENTAL RELEASE MEASURE	S	
	Not applicable		
SECTION 7	HANDLING AND STORAGE		
	When breaking off the tube ends, kee		
	Broken glass tubes should not be pick		
	Tubes should be stored in a cool and	dark place.	
SECTION 8	EXPOSURE PROTECTION		
	Not applicable		
SECTION 9	PHYSICAL AND CHEMICAL PROPE	RTIES	
Fuming sulfuric acid, Barium compound, Chromic Anhydoride, Sulfuric acid:			
Flash point:			
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.

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)

Sulfuric acid

Acute toxicity data: LD50 (orl, rat): 2140mg/kg

LC50 (ihl, cavy): 18mg/m³

Irritation data: Eye; rabbit; 1380μ g; severe

Mutagenicity: Not available Carcinogen: Not available

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)

SECTION 12 ECOLOGICAL INFORMATION

Fuming sulfuric acid, Sulfuric acid, Barium compound:

Not available

Chromic anhydride:

Biodegradability: Not available

Bioaccumulation Concentration scale factor (BCF); 4.6-15 (concentration, $100 \mu g/l$); Potential: 14-21 (concentration, $20 \mu g/l$); 11-43 (concentration $5 \mu g/l$); 16-72

(concentration 94-242 μ g/l)

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

SECTION 13	DISPOSAL CONSIDERATION	
	This tube contains 0.39 mg of hexavalent chromium.	
	Dispose of in accordance with all applicable laws and regulations.	
	(Contact local environmental agency for specific rules.)	
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0505101144	TRANSPORT INFORMATION	
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	OTHER INFORMATION	
	Reasonable care has been taken in the preparation of this	
	information, but the manufacturer makes no warranty of	
	merchantability or any other warranty, expressed or implied, with	
	respect to this information. The manufacturer makes no	
	representations and assumes no liability for any direct, incidental or	
	consequential damages resulting from its use.	
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