

Technical Information
Material Safety Data Sheet

SDT-105_04E

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 8-8-6 Fukayanaka, Ayase-City, Kanagawa 252-1195, Japan			
REFERENCE NUMBER SDT-105_04E		DATE PREPARED April 16, 2009	
PRODUCT NAME	Gas Detector Tube Hydro Carbons Higher Class Tube No.105		
SECTION 2		COMPOSITION/INFORMATION ON INGREDIENTS	
Porous Silica Gel (0.6 g) impregnated with Sulfuric Acid (5%), Fuming Sulfuric Acid (10-15%), Chromic Anhydride (<1%) and Selenium compound (< 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	
Selenium compound, Sulfuric acid and Fuming sulfuric acid:			
Flash point:	Not available		
Autoignition point:	Not available		

SECTION 10 STABILITY AND REACTIVITY

Selenium compound:
Stability: Highly hygroscopic.
Toxic fume is emitted when heated extremely.
Reactivity: Not available
Condition to avoid: Sunlight, Heat, Moisture
Hazardous decomposition product: Selenium fume 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

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

SECTION 11 TOXICOLOGICAL INFORMATION

Selenium compound:
Acute toxicity data: LD50 (skn, rabbit): 4mg/kg (RTECS)
LCLo (ihl, rat): 60mg/m³ (RTECS)
LD50 (orl, rat): 68100 μ g/kg (RTECS)
LD50 (orl, mouse): 23300 μ g/kg (RTECS)
Irritation data: Not available
Chronic toxicity/ Long-term toxicity: Repetition or long term skin contact may cause dermatitides.
Mutagenicity: Not available
Carcinogen: Not available

Sulfuric acid:
Acute toxicity data: LD50 (orl, rat): 2140mg/kg
LC50 (ihl, cavy): 18mg/m³
Irritation data: Eye; rabbit; 1380 μ g; severe
Mutagenicity: Not available
Carcinogen: Not available

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)

SECTION 12 ECOLOGICAL INFORMATION

Not available

SECTION 13 DISPOSAL CONSIDERATION

This tube contains 0.78mg of Hexavalent Chromium and 3.56mg of Selenium.

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**

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.