

Technical Information
Material Safety Data Sheet

SDT-136LA_04E

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			
8-8-6 Fukayanaka, Ayase-City, Kanagawa 252-1195, Japan			
REFERENCE NUMBER		DATE PREPARED	
SDT-136LA_04E		April 16, 2009	
PRODUCT NAME	Gas Detector Tube Methyl Bromide Detector Tube No.136LA		
SECTION 2		COMPOSITION/INFORMATION ON INGREDIENTS	
Pretreatment Tube: Porous Silica Gel (0.6g) impregnated with Fuming Sulfuric Acid (30-35%), Selenium compound (<5%), Chromic Anhydride (<5%) and Sulfuric Acid (<5%) in a glass tube.			
Detector Tube: Porous Silica Gel (0.6g) impregnated with Chromic Anhydride (<1%), Sulfuric Acid (<5%) and O-Tolidine (<0.01%) 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, Fuming sulfuric acid, Chromic Anhydride, 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.
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
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/m ³ (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
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 (ori, 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

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

The pretreatment tube contains 2.6mg of hexavalent chromium and 14.23mg of selenium.
The detector tube contains 1.04mg 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

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.