

Technical Information
Material Safety Data Sheet

SDT-1HH_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-1HH_04E	April 16, 2009	
PRODUCT NAME	Gas Detector Tube Carbon Monoxide Detector Tube No.1HH	
SECTION 2		COMPOSITION/INFORMATION ON INGREDIENTS
		Porous Silica Gel (1.8 g) impregnated with Fuming Sulfuric Acid (20-25%), Selenium compound (<5%) and Chromic Anhydride (<5%) and 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:		
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.
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

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
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)

SECTION 12 **ECOLOGICAL INFORMATION**

Selenium compound, Fuming 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 tube contains 42.69mg of Selenium and 9.62mg 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.

