

**Technical Information**  
**Material Safety Data Sheet**

SDT-133D\_04E

<b>SECTION 1</b>		<b>CHEMICAL PRODUCT AND COMPANY IDENTIFICATION</b>	
<b>MANUFACTURE'S NAME</b> GASTEC CORPORATION	<b>TELEPHONE NUMBER</b> +81-467-79-3910	<b>FACSIMILE NUMBER</b> +81-467-79-3979	
<b>ADDRESS</b> 8-8-6 Fukayanaka, Ayase-City, Kanagawa 252-1195, Japan			
<b>REFERENCE NUMBER</b> SDT-133D_04E		<b>DATE PREPARED</b> May 31, 2007	
<b>PRODUCT NAME</b>	Passive Dosimeter Tube Tetrachloroethylene Dosi-Tube No.133D		
<b>SECTION 2</b>		<b>COMPOSITION/INFORMATION ON INGREDIENTS</b>	
Porous Silica Gel (1.1g) impregnated with Sulfuric Acid (5-15%) and Lead Dioxide (<5%) in a glass tube.			
<b>SECTION 3</b>		<b>HAZARDOUS IDENTIFICATION</b>	
Not applicable			
<b>SECTION 4</b>		<b>FIRST AID MEASURES</b>	
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.		
<b>SECTION 5</b>		<b>FIRE FIGHTING MEASURES</b>	
None			
<b>SECTION 6</b>		<b>ACCIDENTAL RELEASE MEASURES</b>	
Not applicable			
<b>SECTION 7</b>		<b>HANDLING AND STORAGE</b>	
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 refrigerator			
<b>SECTION 8</b>		<b>EXPOSURE PROTECTION</b>	
Not applicable			
<b>SECTION 9</b>		<b>PHYSICAL AND CHEMICAL PROPERTIES</b>	
Lead dioxide, Sulfuric acid:			
Flash point:	Not available		
Autoignition point:	Not available		

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**SECTION 10 STABILITY AND REACTIVITY**

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**Lead dioxide:**

Stability: Stable. Oxygen is emitted when heated.  
Reactivity: Not available  
Condition to avoid: Sunlight, Heat  
Hazardous decomposition product: Lead chloride and trilead tetroxide 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

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**SECTION 11 TOXICOLOGICAL INFORMATION**

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**Lead dioxide:**

Acute toxicity data: LD50 (ip, cavy): 220mg/kg (RTECS)  
Irritation data: Not available  
Mutagenicity: Not available  
Carcinogen: IARC: Possibility human carcinogen (Group 2B)  
JSOH: Possibility human carcinogen (Group 2B) (no sufficient basis)

**Sulfuric acid:**

Acute toxicity data: LD50 (orl, rat): 2140mg/kg  
LC50 (ihl, cavy): 18mg/m<sup>3</sup>  
Irritation data: Eye; rabbit; 1380  $\mu$  g; severe  
Mutagenicity: Not available  
Carcinogen: Not available

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**SECTION 12 ECOLOGICAL INFORMATION**

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Not available

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**SECTION 13 DISPOSAL CONSIDERATION**

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This tube contains 13.86mg of lead.  
Dispose of in accordance with all applicable laws and regulations.  
(Contact local environmental agency for specific rules.)

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**SECTION 14 TRANSPORT INFORMATION**

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Breakage of tubes caused by drops, high pressure or bends should be avoided.

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**SECTION 15 REGULATORY INFORMATION**

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Not applicable

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**SECTION 16 OTHER INFORMATION**

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No specific notes