



# SAFETY DATA SHEET

Manufacturer information	Company	GASTEC CORPORATION
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SDS ID            SDS\_1M\_03            Issue date            31/May/2022

Product name            Carbon monoxide Detector Tube No.1M

Hazards identification            This detector tube , when based on GHS and JIS Z 7252(2019), is corresponded to an article. Under normal use conditions, emits only a small amount of chemical substances, for example, trace amounts of chemical substances, and can be handled as not showing physical and chemical hazards or health hazards to operators. Therefore, this product does not fall under the GHS classification standard.

Composition and information on ingredients            A product made by impregnating porous silica gels(5-15%) with oleum(5-10%), selenium dioxide(<1%) and chromium(VI) oxide(<1%), and sealing them in glass tubes.

First-aid measures            Eyes: If the filler enters the eye, immediately flush with plenty of water for at least 15 minutes and see a doctor.  
Skin: If the filler comes into contact with the skin, immediately wash with soapy water and flush with plenty of water.  
Inhalation: Not applicable.  
Ingestion: If the filler is swallowed, rinse the mouth immediately and see a doctor.

Fire fighting measures            No special measures are needed.

Accidental release measures            If the detector tube is broken, wear appropriate protective equipment to prevent the filler from adhering to or inhaling the skin or eyes.

Handling and storage            Handling            When the ends of the detector tube are broken off to prevent injury, the detector tube is moved away from the eye. Do not touch with bare hands any cuts, fittings, or fillers in the event of breakage of the detector tube.  
Storage            Store in a cold/dark place

Exposure control and protection measures            Not applicable.

Physical and chemical properties            Appearance: A glass tube filled with reagents and sealed at both ends.  
Flash point: Not applicable.  
Ignition point: Not applicable.

Stability and reactivity            Stability: Not applicable.  
Reactivity: Not applicable.  
Conditions to avoid: Direct sunlight, high temperature, freezing should be avoided.  
Hazardous decomposition products: Not applicable.

Toxicological information            Filled material is made by adsorbing a small amount of chemicals to porous silica gels, and there is no hazard information for this. The following describes the hazards to humans of the chemicals and carries as a pure substance.

Selenium dioxide:  
Acute toxicity:  
Oral—rat LD50: 48 mg Se/kg(SeO<sub>2</sub> equivalent : 67.5 mg/kg) (ATSDR,2003)  
Dermal—no data  
Inhalation(dust,mist)—no data

Oleum :

Acute toxicity :

Oral—no data

Dermal—no data

Inhalation(dust,mist)—ratInhalationLC50 : 347ppm/1H

(= 86.7ppm/4H = 0.63 mg/L/4H)

(assuming mist)(RTECS,1995)

Sulfuric acid :

Acute toxicity :

Oral—rat LD50 : 2140mg/kg(SIDS,2001)

Dermal—no data

Inhalation(dust,mist)—ratLC50(4-h exposure) : 0.375mg/L(SIDS,2001)

Chromium(VI) oxide :

Acute toxicity :

Oral—rat LD50 : 52-113mg/kg (EU-RAR,2005)

Dermal—rabbit LD50 : 30mg Cr (VI) /kg (CrO<sub>3</sub> equivalent : 57.7 mg/kg)  
(CICAD 78 ,2013 / ATSDR, 2012)

Inhalation(dust,mist)—ratLC50(4-h exposure) : 0.217mg/L (EU-RAR,2005)

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Ecological information

No data

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Disposal considerations

This detector tube contains 2.60mg of hexavalent chromium and 5.69mg of selenium. Should be disposed properly in accordance with local regulations.

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Transport information

Avoid breakage of the detector tube due to dropping, pressurization, bending, etc.

UN number: Not applicable

UN Classification: Not applicable

IATA: Not applicable

Poisonous and Deleterious Substances Control Law: Not applicable

Fire Defense Law: Not applicable

Marine Regulation Information: Not applicable

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Japanese regulatory information

Industrial Safety and Health Law : Hazardous substance No.142, 333(Article 57-2)

PRTR : 1-88 Hexavalent chromium

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Other information

References :

Chemical Risk Information Platform (CHRIP): NITE

Safety website in the workplace of the Ministry of Health, Labour and Welfare

This data sheet is provided to businesses that handle hazardous chemical products as reference information for ensuring safe handling. With reference to this, business operators are requested to understand that they need to take appropriate measures in accordance with the actual conditions of individual handling, etc. at their own responsibility, and then use them. This data sheet is prepared based on JIS Z 7253(2019).The contents of this report have been prepared based on the latest information as of the date of revision, but if new information is obtained, it may be added or corrected.

This data sheet is not a guarantee of safety.

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