

Detector Tube Types Carbon monoxide

U070013400

Revision no.: 3.00

Revision date: 10.01.2024

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0. General notes

These products are articles according to article 3.3 of regulation (EC) no. 1907/2006 (REACH). It is not necessary to supply a Safety Data Sheet for these products. Safety Data Sheets stipulate according to Article 31 for hazardous substances and preparations, but not for articles. UNIPHOS is obliged to supply its customers with appropriate information to ensure safe handling. A special format is not required for this information.

1. Identification of the substance/mixture and of the company/undertaking

Product identifier: Detector Tube Types Carbon monoxide
Relevant identified uses of the substance or mixture and uses advised against
Use of the substance/mixture: Detector tube
Uses advised against: The product is to be used exclusively for the applications named in the directions for use.

Details of the supplier of the safety data sheet

Company name: UNIPHOS ENVIROTRONIC PVT. LTD.
Street: Readymoney Terrace 167, Dr. Annie Besant Road, Worli
Place: Mumbai 400018, India
Telephone: +91 22 61233500
Telefax: +91 22 24978119
Emergency telephone: +91 22 61233500
Further Information: Apply Safety data sheet to the following products:

Tube Code	US Code	Tube Name	Range
CF000753	SCO-2	Carbon Monoxide	1 - 30 PPM
CF000939	CCCO-2	CO in CO2	1 - 50 PPM
CF000035	SCO-3	Carbon Monoxide	5 - 100 PPM
CF000036	SCH-3	Co In H2	5 - 100 PPM
CF000038	SCO-4	Carbon Monoxide	50 - 1000 PPM
CF000037	SCO-4M	Carbon Monoxide	25 - 600 PPM

Tube Code	US Code	Tube Name	Range
CF000039	SCO-5	Carbon Monoxide	100 - 3000 PPM
CF000642	SCH-5	Co In H2	100 - 3000 PPM
CF000040	SCO-6M	Carbon Monoxide	0.01 - 0.7 %
CF000750	SCO-8L	Carbon Monoxide	0.1 - 7 %
CF000042	SCO-8	Carbon Monoxide	1 - 20 %
CF001184	ACO-2	CO-HP	5 - 50 PPM

2. Hazards identification**Classification of the substance or mixture:**

This mixture is not classified as dangerous according to Directive 1999/45/EC.
As an article the product does not need to be labelled in accordance with EC-directives or respective national laws.

Label elements**Hazardous components which must be listed on the label:**

Sulfuric acid fuming
Chromium trioxide

Precautionary statement(s)

P102 Keep out of the reach of children.
P262 Do not get in eyes, on skin, or on clothing.
P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.

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P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Additional advice on labelling:

As an article the product does not need to be labelled in accordance with EC-directives or respective national laws.

Other hazards:

Detector tube: No hazards deemed to be of major importance.
Content: May cause cancer. May cause heritable genetic damage. Harmful by inhalation. Causes burns.

3. Composition/information on ingredients

Mixtures

Chemical characterization:

Sealed glass tube, filled with inert granules, treated with oleum, chromiumtrioxide, di-iodine pentoxide, selenium(IV)oxide

Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
-	Sulfuric acid fuming	5 - 10 %
8014-95-7	C	
	Skin Corr. 1; H335 H314	
215-607-8	Chromium trioxide	0.1 - 0.2 %
1333-82-0	O, Carc. Cat. 1, Muta. Cat. 2, Repr. Cat. 3, T+, T, C, N	
024-001-00-0	Ox. Sol. 1, Carc. 1A, Muta. 1B, Repr. 2, Acute Tox. 2, Acute Tox. 3, Acute Tox. 3, STOT RE 1, Skin Corr. 1A, Resp. Sens. 1, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1; H271 H350 H340 H361f H330 H311 H301 H372 H314 H334 H317 H400 H410	
-	di-Iodine pentoxide	< 0.1 %
12029-98-0	O, Xi R08-36/38	
	Ox. Sol. 2, Skin Irrit. 2, Eye Irrit. 2; H272 H315 H319	
231-194-7	Selenium dioxide	< 0.2 %
7446-08-4	T, N	
	Acute Tox. 3, Acute Tox. 3, STOT RE 2, Aquatic Chronic 1; H301 H331 H373 H410	

Full text of P- and H-phrases: see section 16.

4. First aid measures

Description of first aid measures

After inhalation:

Not applicable for intact detector tubes.
When indicator material is spilled: Inhalation of vapours: Move to fresh air. Call a physician immediately.

After contact with skin:

Not applicable for intact detector tubes.
When indicator material is spilled: Wash off immediately with plenty of water. Consult a physician. Cut be handled through a doctor.

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After contact with eyes:

Not applicable for intact detector tubes.
When indicator material is spilled: Rinse immediately with plenty of water, also under the eyelids. Consult an ophthalmologist immediately.

After ingestion:

Not applicable for intact detector tubes.
When indicator material is spilled: Call a physician immediately. If conscious, drink plenty of water.

5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media:

The product itself does not burn. Use extinguishing measures that are appropriate to the environment.

Extinguishing media which must not be used for safety reasons:

None.

Special hazards arising from the substance or mixture:

None.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Release not possible if used properly.

Methods and material for containment and cleaning up:

When indicator material is spilled: Dilute with water. Soak up the product with absorbent, non-flammable material (acid binding agent). Avoid contact of breakage of glass and indicator material. Dispose of as described in section 13.

7. Handling and storage

Precautions for safe handling

Advice on safe handling:

See the specific Instruction for use.

Advice on protection against fire and explosion:

No special precautions required.

Conditions for safe storage, including any incompatibilities

Advice on storage compatibility:

Do not store together with edibles.

Further information on storage conditions:

See the specific Instruction for use. Recommended storage temperature: <20°C

8. Exposure controls/personal protection

Control parameters

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Exposure limits (EH40 / OSHA PEL / ACGIH TLV)

CAS No.	Chemical name	Category	mg/m ³	Origin
	- Chromium (VI) compounds (as Cr)	TWA (8 h)	0.05	WEL / OSHA PEL/ ACGIH
		STEL (15 min)	-	WEL / OSHA PEL/ ACGIH
7664-93-9	Sulphuric acid (mist)	TWA (8 h)	1	EU/ OSHA PEL/ ACGIH
		STEL (15 min)	3	ACGIH
	- Selenium and compounds, except hydrogen selenide (as Se)	TWA (8 h)	0.1	WEL
			0.2	OSHA PEL/ ACGIH
		STEL (15 min)	-	WEL / OSHA PEL/ ACGIH

Additional advice on limit values:

Release not possible if used properly.

Exposure controls

Protective and hygiene measures:

Avoid contact with eyes or skin after breaking of the tub tips.
 Avoid contact of breakage of glass and indicator material. Do not take up glass beads and content of the tube with bare hands. Wash hands before breaks and at the end of the workday.

Respiratory protection:

Not required.

Hand protection:

Not required.

Eye protection:

Not required.

Skin protection:

Not required.

9. Physical and chemical properties

Information on basic physical and chemical properties

Physical state:

Granules in a glass tube.

Colour:

brownish and white

Odour:

pungent

pH-Value (at 20 °C):

2

Test method

50 g/l water

Changes in the physical state

Melting point:

n.a.

Boiling point:

n.a.

Flash point:

n.a.

Lower explosion limits:

n.a.

Upper explosion limits:

n.a.

Vapour pressure:

n.a.

Water solubility:

partly soluble

(at 20 °C)

Viscosity / dynamic:

n.a.

10. Stability and reactivity

Reactivity:

None if handled correctly in accordance with the instructions for use.

Possibility of hazardous reactions:

None under recommended use and storage conditions.

Conditions to avoid:

None if handled correctly in accordance with the instructions for use.

Hazardous decomposition products:

No decomposition if stored and applied as directed.

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Further information:

After the opening of the tube: Sensitive to air (discolouration)

11. Toxicological information

Information on toxicological effects
Toxicokinetics, metabolism and distribution:

Not applicable for intact detector tubes.

When indicator material is spilled: No data available.

Acute toxicity:

Not applicable for intact detector tubes.

When indicator material is spilled: No data available.

CAS No.	Chemical name				
	Exposure routes	Method	Dose	Species	h
1333-82-0	Chromium trioxide				
	Acute oral toxicity	LD50	50 mg/kg	rats	
	Acute dermal toxicity	LD50	55 mg/kg	rats	

Irritation and corrosivity:

Not applicable for intact detector tubes.

In the formation of vapours: Vapours may be irritating to eyes, nose, throat, and lungs. May cause skin irritation.
 Ingestion causes burns of the upper digestive and respiratory tracts.

Sensitizing effects:

Not applicable for intact detector tubes.

Chromium trioxide: May cause sensitization by inhalation and skin contact.

Carcinogenic/mutagenic/toxic effects for reproduction:

Not applicable for intact detector tubes.

Chromium trioxide: Carcinogenic, category: K1. Mutagenic, category: M2. May impair fertility, category: RF3.

12. Ecological information

Toxicity:

Not applicable for intact detector tubes.

When indicator material is spilled: No data available.

CAS No.	Chemical name				
	Aquatic toxicity	Method	Dose	Species	h
1333-82-0	Chromium trioxide				
	Acute crustacea toxicity	EC50	0,162 mg/l	Daphnia Magna	48

Persistence and degradability:

Not applicable for intact detector tubes.

When indicator material is spilled: No data available.

Further information:

When indicator material is spilled: Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

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13. Disposal considerations**Waste treatment methods****Recommendation Waste disposal
number of waste from residues/unused
products:**

150202

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; absorbents, filter materials, wiping cloths and protective clothing; absorbents, filter materials (including oil filters not otherwise specified), wiping cloths, protective clothing contaminated by dangerous substances

- 1) Do not dispose of used tubes carelessly, take precautions to prevent the contents from entering creeks, rain water run-off, sewers or water supplies.
- 2) Follow all local, state and federal laws and regulations regarding waste
- 3) A box of Uniphos detector tubes contain less than 0.5 grams of hazardous materials and as such are classified a small quantity exception for transportation (49 CFR 173.4) and require no special shipping consideration.

**Recommendation Waste disposal
number of contaminated packaging:**

150101

WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); paper and cardboard packaging

14. Transport information**Land transport (ADR/RID)****Other applicable information (land
transport):**

Not classified as dangerous regarding transport regulations.

Inland waterways transport**Other applicable information (inland
waterways transport):**

Not classified as dangerous regarding transport regulations.

Marine transport**Other applicable information (marine
transport):**

Not classified as dangerous regarding transport regulations.

Air transport**Other applicable information (air
transport):**

Not classified as dangerous regarding transport regulations.

15. Regulatory information**Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulatory information****16. Other information****Changes:**

Sections which have been changed in comparison to the preceding edition: 1.

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Full text of P-Statements referred to under sections 2 and 3:

P102 Keep out of the reach of children.
 P262 Do not get in eyes, on skin, or on clothing.
 P305 + P351 + P338 – IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
 P301 + P310 – IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.

Full text of H-Statements referred to under sections 2 and 3:

H271 May cause fire or explosion; strong oxidiser.
 H272 May intensify fire; oxidiser.
 H301 Toxic if swallowed.
 H311 Toxic in contact with skin.
 H314 Causes severe skin burns and eye damage.
 H315 Causes skin irritation.
 H317 May cause an allergic skin reaction.
 H319 Causes serious eye irritation.
 H330 Fatal if inhaled.
 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
 H335 May cause respiratory irritation.
 H340 May cause genetic defects.
 H350 May cause cancer.
 H361f Suspected of damaging fertility.
 H372 Causes damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.

Further Information:

The information is based on present levels of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The product is to be used exclusively for the applications named in the technical leaflet or in the processing instructions. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

n.a. = not applicable
 n.d. = not determined

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)