

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 1 of 7

### 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 Nitrogen dioxide & Nitric Oxide  
**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 pre tube for following products:  
 Part-No. Product name

CF000908	SNDNO-4L	Nitrogen dioxide & Nitric Oxide
		Range: 2.5 to 200 ppm

### 2. Hazards identification

**Classification of the substance or mixture:**

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:**

Chromium trioxide, Sulphuric acid

**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  
 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.

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 2 of 7

**Other hazards:** Detector tube: No hazards deemed to be of major importance.  
Content: May cause cancer. May cause heritable genetic damage. Harmful by inhalation. Irritating to eyes and skin.

### 3. Composition/information on ingredients

#### Mixtures

**Chemical characterization:** Sealed glass tube, filled with inert granules, treated with sulphuric acid, chromium trioxide

#### Hazardous components

EC No.	Chemical name	Quantity
CAS No.	Classification	
Index No.	GHS classification	
REACH No.		
231-639-5	Sulphuric acid	7 - 8 %
7664-93-9	C	
016-020-00-8	Skin Corr. 1A; 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	

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. If symptoms persist, call a physician.

**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.

**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.

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 3 of 7

### 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

#### Exposure limits (EH40 / OSHA PEL / ACGIH TLV)

CAS No.	Chemical name	Category	mg/m <sup>3</sup>	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

#### Additional advice on limit values:

Release not possible if used properly.

#### Exposure controls

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 4 of 7

<b>Protective and hygiene measures:</b>	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 breads and content of the tube with bare hands. Wash hands before breaks and at the end of the workday.
<b>Respiratory protection:</b>	Not required.
<b>Hand protection:</b>	Not required. When indicator material is spilled: Protective gloves made out of: Nitrile rubber
<b>Eye protection:</b>	Not required.
<b>Skin protection:</b>	Not required.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state:</b>	Granules in a glass tube.
<b>Colour:</b>	White
<b>Odour:</b>	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: (at 20 °C)	partly soluble
Viscosity / dynamic:	n.a.

## 10. Stability and reactivity

<b>Reactivity:</b>	None if handled correctly in accordance with the instructions for use.
<b>Possibility of hazardous reactions:</b>	None under recommended use and storage conditions.
<b>Conditions to avoid:</b>	None if handled correctly in accordance with the instructions for use.
<b>Hazardous decomposition products:</b>	No decomposition if stored and applied as directed.
<b>Further information:</b>	After the opening of the tube: Sensitive to air (discolouration )

## 11. Toxicological information

### Information on toxicological effects

<b>Toxicocinetics, metabolism and distribution:</b>	Not applicable for intact detector tubes. When indicator material is spilled: No data available.
<b>Acute toxicity:</b>	Not applicable for intact detector tubes. When indicator material is spilled: No data available.

**Detector Tube Nitrogen dioxide & Nitric Oxide**

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 5 of 7

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:**

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.

**Bioaccumulative potential:**

Not applicable for intact detector tubes.  
When indicator material is spilled: No data available.

**Mobility in soil:**

Not applicable for intact detector tubes.  
When indicator material is spilled: No data available.

**Other adverse effects:**

Not applicable for intact detector tubes.

**Further information:**

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

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

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Page 6 of 7

### 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.

## Detector Tube Nitrogen dioxide & Nitric Oxide

U070018400

Revision no.: 1.00

Revision date: 13.01.2018

Print date: 13.01.2018

Page 7 of 7

### 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: None

**Abbreviations and acronyms:** n.a. = not applicable  
n.d. = not determined

**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.  
H301 Toxic if swallowed.  
H311 Toxic in contact with skin.  
H314 Causes severe skin burns and eye damage.  
H317 May cause an allergic skin reaction.  
H330 Fatal if inhaled.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
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.

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