

## Smoke Tubes

D050016501

Revision No: 3,00

Revision date: 30.09.2011

Print date: 19.12.2011

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

**Product identifier:** Smoke Tubes  
**Relevant identified uses of the substance or mixture and uses advised against**  
**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:** MSA AUER GmbH  
**Street:** Thiemannstrasse 1  
**Place:** D-12059 Berlin  
**Telephone:** ++49-30-6886-0  
**Telefax:** ++49-30-6886-1558  
**Emergency telephone:** 1-800-255-3924 USA/CDN  
++1-813-248-0585 internat.

**Further Information:** Apply Safety data sheet to the following products:

Part-No.	Product name
D5019701	Smoke Developer
D5019702	Smoke Generator

### 2. Hazards identification

**Classification of the substance or mixture:**

Indications of danger : Irritant  
R-phrases:  
Irritating to eyes and skin.

#### Label elements

**Danger symbols:**



Xi - Irritant

Xi - Irritant

**R phrases:**

36/38

Irritating to eyes and skin.

**S phrases:**

02

Keep out of the reach of children.

26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

28

After contact with skin, wash immediately with plenty of water.

46

If swallowed, seek medical advice immediately and show this container or label.

24/25

Avoid contact with skin and eyes.

### 3. Composition/information on ingredients

#### Mixtures

**Chemical characterization:**

Sealed glass tube, filled with inert granules, treated with sulfuric acid fuming

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### Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
-	Sulfic acid fumic	4-5 %
8014-95-7	C R14-35-37	
	Skin Corr. 1; H335 H314	

Full text of R- 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: 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.

#### 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.

## 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.

#### Advice for firefighters:

None.

## 6. Accidental release measures

### Personal precautions, protective equipment and emergency procedures:

Release not possible if used properly.

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### 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. 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. Store in cool place.

## 8. Exposure controls/personal protection

### Control parameters

#### Exposure limits (EH40)

CAS No	Chemical name	ml/m <sup>3</sup>	mg/m <sup>3</sup>	F/ml	Category	Origin
7664-93-9	Sulphuric acid (mist)	-	1		TWA (8 h)	EU
		-	-		STEL (15 min)	EU

#### 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 breads 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.

When indicator material is spilled: Protective gloves made out of: nitrile rubber, butyl rubber

#### Eye protection:

Not required.

When indicator material is spilled: Safety glasses

#### Skin protection:

Not required.

## 9. Physical and chemical properties

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### Information on basic physical and chemical properties

**Physical state:** Granules in a glass tube.  
**Colour:** red  
**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:  
(at 20 °C) low solubility  
Viscosity / dynamic: n.a.

## 10. Stability and reactivity

**Reactivity:** None if handled correctly  
**Chemical stability:** Stable under proper storage and handling.  
**Possibility of hazardous reactions:** None if handled correctly  
**Conditions to avoid:** None if handled correctly  
**Incompatible materials:** None if handled correctly  
**Hazardous decomposition products:** No decomposition if stored and applied as directed.  
**Further information:** After the opening of the tube: sensitive to water

## 11. Toxicological information

### Information on toxicological effects

**Toxicocinetics, metabolism and distribution:** No data available.

**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.

## 12. Ecological information

**Toxicity:** No data available.

**Persistence and degradability:** No data available.

**Bioaccumulative potential:** No data available.

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<b>Mobility in soil:</b>	No data available.
<b>Results of PBT and vPvB assessment:</b>	The product does not contain any substance which meets the PBT criteria (persistent/bio-accumulative/toxic) or the vPvB criteria (very persistent/very bio-accumulative).
<b>Other adverse effects:</b>	No data available.
<b>Further information:</b>	When indicator material is spilled: Should not be released into the environment. Do not flush into surface water or sanitary sewer system.

### 13. Disposal considerations

<b>Waste treatment methods</b>	
<b>Recommendation Waste disposal number of waste from residues/unused products:</b>	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 Classified as hazardous waste.
<b>Recommendation Waste disposal number of contaminated packaging:</b>	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

<b>Land transport (ADR/RID)</b>	
<b>Other applicable information (land transport):</b>	Not classified as dangerous regarding transport regulations.
<b>Inland waterways transport</b>	
<b>Other applicable information (inland waterways transport):</b>	Not classified as dangerous regarding transport regulations.
<b>Marine transport</b>	
<b>Other applicable information (marine transport):</b>	Not classified as dangerous regarding transport regulations.
<b>Air transport</b>	
<b>Other applicable information (air transport):</b>	Not classified as dangerous regarding transport regulations.

### 15. Regulatory information

**Safety, health and environmental regulations/legislation specific for the substance or mixture**

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### National regulatory information

## 16. Other information

### Changes:

Sections which have been changed in comparison to the preceding edition: 1, 2, 3, 11, 12

### Abbreviations and acronyms:

n.a. = not applicable

n.d. = not determined

### Full text of R-phrases referred to under sections 2 and 3:

14 Reacts violently with water.

35 Causes severe burns.

36/38 Irritating to eyes and skin.

37 Irritating to respiratory system.

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

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

### 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.)*