

**EC safety data sheet**

**Trade name:** BioSpectrometer Test filter set - Holmium

**Product no.:** 6135931070-00

**Current version :** 3.0.0, issued: 11.06.2015

**Replaced version:** 2.0.0, issued: 19.07.2013

**Region:** GB

**SECTION 1: Identification of the substance/mixture and of the company/undertaking**

**1.1 Product identifier**

**Trade name**

**BioSpectrometer Test filter set - Holmium**

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

**Relevant identified uses of the substance or mixture**  
wavelengths adjustment container

**Uses advised against**  
No data available.

**1.3 Details of the supplier of the safety data sheet**

**Address**

Eppendorf AG  
Barkhausenweg 1  
D-22339 Hamburg

Telephone no. +49 40 53801-0

**Information provided by / telephone**

Eppendorf Application-Hotline  
Tel.: +49 1803 66 67 89  
Fax: +49 4053 99 01 25  
email: support@eppendorf.com

**Advice on Safety Data Sheet**  
sdb\_info@umco.de

**1.4 Emergency telephone number**

For medical advice (in German and English):  
+49 (0)551 192 40 (Giftinformationszentrum Nord)

**SECTION 2: Hazards identification**

**2.1 Classification of the substance or mixture**

**Classification information**

This product is in the sense of article 3 of the Regulation (EC) 1907/2006 (REACH) an article and not subject to the labelling obligations according to:  
- Art. 1, Regulation (EC) 1272/2008 (CLP).  
To provide a safety data sheet is not mandatory for articles and is done on a voluntary basis.

**2.2 Label elements**

Not relevant

**2.3 Other hazards**

The information given in this safety data sheet are for the cuvette. Due to the small size and volume of the sealed cells and the complete sealing of the materials in quartz cells the only contact that can be made to the chemicals is through the breakage of the cells. The quartz shards would be more hazardous and must be handled as with any glass breakage. Direct skin contact will cause irritation.

**SECTION 3: Composition/information on ingredients**

**3.1 Substances**

Not applicable. The product is not a substance.

**3.2 Mixtures**

**Chemical characterization**

Cuvette, contains aqueous solution prepared in 10% (volume fraction) perchloric acid to contain 4.0% (mass fraction) Holmium Oxide (Ho<sub>2</sub>O<sub>3</sub>).

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**Hazardous ingredients**

This product does not contain substances to be mentioned according to EU Regulation No 1907/2006 (REACH), annex II.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

**General information**

In case of persisting adverse effects, consult a physician. Change contaminated, saturated clothing.

**After inhalation**

Remove affected person from the immediate area. Ensure supply of fresh air.

**After skin contact**

Wash off immediately with soap and water.

**After eye contact**

Separate eyelids, wash the eyes thoroughly with water (15 min.).

**After ingestion**

Seek medical advice immediately. Rinse mouth thoroughly with water. Never give anything by mouth to an unconscious person.

### 4.2 Most important symptoms and effects, both acute and delayed

No data available.

### 4.3 Indication of any immediate medical attention and special treatment needed

No data available.

## SECTION 5: Firefighting measures

### 5.1 Extinguishing media

**Suitable extinguishing media**

Foam; Carbon dioxide; Extinguishing powder; Water spray jet

**Unsuitable extinguishing media**

No data available.

### 5.2 Special hazards arising from the substance or mixture

In the event of fire, the following can be released: Carbon dioxide (CO<sub>2</sub>); Carbon monoxide (CO)

### 5.3 Advice for firefighters

Use self-contained breathing apparatus. Wear protective clothing.

## SECTION 6: Accidental release measures

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

**For non-emergency personnel**

Refer to protective measures listed in sections 7 and 8. Ensure adequate ventilation.

**For emergency responders**

No data available. Personal protective equipment (PPE) - see Section 8.

### 6.2 Environmental precautions

Do not discharge into the drains/surface waters/groundwater.

### 6.3 Methods and material for containment and cleaning up

Take up mechanically. When picked up, treat material as prescribed under heading "Disposal considerations".

### 6.4 Reference to other sections

No data available.

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**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

**Advice on safe handling**

No special measures necessary if stored and handled as prescribed. Service temperature: ambient temperature  
All standards may be stored without hesitation at a temperature range of +0. °C to +45 °C. However, one should wait until the standard is adapted to the ambient temperature conditions at which it is going to be used (approx. +20 - +22 °C) before measuring.

**General protective and hygiene measures**

Do not eat, drink or smoke during work time. Keep away from foodstuffs and beverages. Wash hands before breaks and after work.

**Advice on protection against fire and explosion**

No special measures necessary.

**7.2 Conditions for safe storage, including any incompatibilities**

**Technical measures and storage conditions**

Keep container tightly closed and dry in a cool, well-ventilated place. Keep from freezing.

**Recommended storage temperature**

Value 5 - 45 °C

**Requirements for storage rooms and vessels**

Keep the product in the original packing.

**Advice on storage assembly**

None known

**7.3 Specific end use(s)**

No data available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

No parameters available for monitoring.

**8.2 Exposure controls**

**Appropriate engineering controls**

No data available.

**Personal protective equipment**

**Respiratory protection**

No special measures required.

**Eye / face protection**

Safety glasses recommended

**Hand protection**

Sufficient protection is given wearing suitable protective gloves checked according to i.e. EN 374, in the event of risk of skin contact with the product . Before use, the protective gloves should be tested in any case for its specific work-station suitability (i.e. mechanical resistance, product compatibility and antistatic properties). Adhere to the manufacturer's instructions and information relating to the use, storage, care and replacement of protective gloves. Protective gloves shall be replaced immediately when physically damaged or worn. Design operations thus to avoid permanent use of protective gloves.

**Other**

Check suitability of protective clothing for the specific workplace conditions. Chemical resistance of the protective equipment should be discussed with the manufacturer of the protective equipment.

**Environmental exposure controls**

No data available.

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**SECTION 9: Physical and chemical properties**

**9.1 Information on basic physical and chemical properties**

<b>Form/Colour</b>	
cuvette	
transparent	
<b>Odour</b>	
odourless	
<b>Odour threshold</b>	
No data available	
<b>pH value</b>	
No data available	
<b>Boiling point / boiling range</b>	
Value	100 °C

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<b>Melting point / melting range</b>
No data available
<b>Decomposition point / decomposition range</b>
No data available
<b>Flash point</b>
No data available
<b>Auto-ignition temperature</b>
No data available
<b>Oxidising properties</b>
No data available
<b>Explosive properties</b>
No data available
<b>Flammability (solid, gas)</b>
No data available
<b>Lower flammability or explosive limits</b>
No data available
<b>Upper flammability or explosive limits</b>
No data available
<b>Vapour pressure</b>
No data available
<b>Vapour density</b>
No data available
<b>Evaporation rate</b>
No data available
<b>Relative density</b>
No data available
<b>Density</b>
No data available
<b>Solubility in water</b>
No data available
<b>Solubility(ies)</b>
No data available
<b>Partition coefficient: n-octanol/water</b>
No data available
<b>Viscosity</b>
No data available

9.2 Other information

<b>Other information</b>
No data available.

**SECTION 10: Stability and reactivity**

10.1 Reactivity

No data available.

10.2 Chemical stability

stable if stored and handled properly.

10.3 Possibility of hazardous reactions

Dangerous reactions are not to be expected when handling product according to its intended use.

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**10.4 Conditions to avoid**

None known

**10.5 Incompatible materials**

None known.

**10.6 Hazardous decomposition products**

No hazardous decomposition products known.

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

<b>Acute oral toxicity</b>
No data available
<b>Acute dermal toxicity</b>
No data available
<b>Acute inhalational toxicity</b>
No data available
<b>Skin corrosion/irritation</b>
No data available
<b>Serious eye damage/irritation</b>
No data available
<b>Respiratory or skin sensitisation</b>
No data available
<b>Germ cell mutagenicity</b>
No data available
<b>Reproduction toxicity</b>
No data available
<b>Carcinogenicity</b>
No data available
<b>STOT-single exposure</b>
No data available
<b>STOT-repeated exposure</b>
No data available
<b>Aspiration hazard</b>
No data available
<b>Delayed and immediate effects as well as chronic effects from short and long-term exposure</b>
When handled appropriately adverse health effects are not to be expected.

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**SECTION 12: Ecological information**

**12.1 Toxicity**

<b>Toxicity to fish (acute)</b>
No data available
<b>Toxicity to fish (chronic)</b>
No data available
<b>Toxicity to Daphnia (acute)</b>
No data available
<b>Toxicity to Daphnia (chronic)</b>
No data available
<b>Toxicity to algae (acute)</b>
No data available
<b>Toxicity to algae (chronic)</b>
No data available
<b>Bacteria toxicity</b>
No data available

**12.2 Persistence and degradability**

No data available.

**12.3 Bioaccumulative potential**

No data available.

**12.4 Mobility in soil**

No data available.

**12.5 Results of PBT and vPvB assessment**

No data available.

**12.6 Other adverse effects**

No data available.

**12.7 Other information**

<b>Other information</b>
No special measures necessary.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment methods**

**Product**

Allocation of a waste code number, according to the European Waste Catalogue, should be carried out in agreement with the regional waste disposal company.

**Packaging**

Residuals must be removed from packaging and when emptied completely disposed of in accordance with the regulations for waste removal. Incompletely emptied packaging must be disposed of in the form of disposal specified by the regional disposer.

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## SECTION 14: Transport information

### 14.1 Transport ADR/RID/ADN

The product is not subject to ADR/RID/ADN regulations.

### 14.2 Transport IMDG

The product is not subject to IMDG regulations.

### 14.3 Transport ICAO-TI / IATA

The product is not subject to ICAO-TI / IATA regulations.

### 14.4 Other information

No data available.

### 14.5 Environmental hazards

Information on environmental hazards, if relevant, please see 14.1 - 14.3.

### 14.6 Special precautions for user

No data available.

### 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not relevant

## SECTION 15: Regulatory information

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

#### EU regulations

#### **Regulation (EC) No 1907/2006 (REACH) Annex XIV (List of substances subject to authorisation)**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances considered as substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### **REACH candidate list of substances of very high concern (SVHC) for authorisation**

According to available data and the information provided by preliminary suppliers, the article does not contain substances that are considered substances meeting the criteria for inclusion in annex XIV (List of Substances Subject to Authorisation) as laid down in Article 57 and article 59 of REACH (EC) 1907/2006.

#### **Regulation (EC) No 1907/2006 (REACH) Annex XVII: RESTRICTIONS ON THE MANUFACTURE, PLACING ON THE MARKET AND USE OF CERTAIN DANGEROUS SUBSTANCES, PREPARATIONS AND ARTICLES**

According to the data available and/or specifications supplied by upstream suppliers, this product does not contain any substances requiring authorisation as listed on Annex XIV of the REACH regulation (EC) 1907/2006.

#### **Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances**

This product is not subject to Part 1 or 2 of Annex I.

#### **Other regulations**

Adhere to the national sanitary and occupational safety regulations when using this product.

### 15.2 Chemical safety assessment

No data available.

## SECTION 16: Other information

#### **Sources of key data used to compile the data sheet:**

Regulation (EC) No 1907/2006 (REACH), 1272/2008 (CLP) as amended in each case.

EC Directives 2000/39/EC, 2006/15/EC, 2009/161/EU

National Threshold Limit Values of the corresponding countries as amended in each case.

Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.

The data sources used to determine physical, toxic and ecotoxic data, are indicated directly in the corresponding chapter.

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**Department issuing safety data sheet**

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This information is based on our present state of knowledge and experience.

The security data sheet describes products with a view to the security requirements.

However, it should not constitute a guarantee for any specific product properties and shall not establish a legally valid relationship.

Alterations/supplements:

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