according to Regulation (EC) No. 1907/2006

Trade name: SPT0, SPT1, SPT2, SPT3, SPT5

Revision date: 21.02.2015 Version: 02/2015 EN

1. Identification of the substance and of the company

1.1 Product identifier

Substance name: Hexasodium tungstate hydrate

Index-No.: 074-001-00-X EC-No.: 412-770-9 CAS-No.: 12333-13-0

REACH-Registration No.: 01-2120061128-61-0000

Synonyms: Natriummetawolframathydrate, Natriummetawolframat, Natriumpolywolframat, Sodium

metatungstate, Sodium polytungstate hydrate, SPT

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

Relevant identified uses: For the preparation of aqueous heavy-liquids.

1.3 Details of the supplier of the safety data sheet

Supplier: TC-Tungsten Compounds

Address: Tannenweg 2

D-96271 Grub am Forst
Competent person: Dr. Rainer Kamps
Phone: +49 (0)9560-742
Fax: +49 (0)9560-1707

1.4 EMERGENCY TELEPHONE NUMBER

+49 (0) 228-19 240 (University of Bonn, Central Information against poisoning, 24 h)

service@heavy-liquid.com

2. Hazards identification

E-Mail:

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]: Acute Tox. 4 H302; Eye Dam. 1 H318; Aquatic Chronic 3 H412 Classification according to Regulation 67/548/EEC or 1999/45/EC:

Xn R22; Xi R41; R52-53

Full text of R-, H- and EUH-phrases: see section 16.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Hazard pictograms:





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TC-TUNGSTEN COMPOUNDS

Signal word: Danger

Hazard statements:

H302 Harmful if swallowed.H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

Precautionary statements:

P261 Avoid breathing dust/fume/gas/mist/vapours/spray.

P273 Avoid release to the environment.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

according to Regulation (EC) No. 1907/2006

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Composition / information on ingredients

3.1 Substances

Substance name: Hexasodium tungstate hydrate

Index-No.: 074-001-00-X EC-No.: 412-770-9 CAS-No.: 12333-13-0

REACH-Reg. No.: 01-2120061128-61-0000

Purity: > 99 %

First aid measures

Description of first aid measures

Following inhalation: Take the patient into the fresh air. Symptomatic treatment.

Following skin contact: Wash immediately with plenty of water.

Following eye contact: Rinse eyes with water for at least 15 minutes, keeping the lids open. Consult a doctor. Following ingestion: In case of swallowing, drink plenty of water. Induce vomiting. Symptomatic treatment.

Consult a doctor.

5. Fire fighting measures

5.1 **Extinguishing media**

Suitable extinguishing media: Carbon dioxide, foam, powder, water spray jet, water spray mist.

5.2 Special hazards arising from the substance or mixture

In case of fire generation of tungsten trioxide.

5.3 **Advice for fire-fighters**

Prevent fire-extinguishing water from contaminating surface or ground waters.

6. **Accidental release measures**

Personal precautions, protective equipment and emergency procedures 6.1

Avoid contact with skin and eyes. Use the personal protective equipment listed in Chapter 8.

6.2 **Environmental precautions**

Prevent product from invading surface waters and soil. Do not empty into drains.

6.3 Methods and material for containment and cleaning up

Spilled material may be collected mechanically under avoidance of a dust, filled into appropriate containers.

7. Handling and storage

7.1 Precautions for safe handling

Measures taken as a protection from fire and explosions: Measures taken as a protection from dust and aerosols:

General hygiene measures

Keep away from sources of ignition. Provide for sufficient ventilation and suction.

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Wash

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TC-TUNGSTEN COMPOUNDS

7.2 Conditions for safe storage, including any incompatibilities

Storage conditions: Store in a dry, cool and well-ventilated place. Keep away from food

products and beverages.

Requirements for storage rooms and vessels: Keep in sealed original containers.

Storage class: 13 (VCI)

according to Regulation (EC) No. 1907/2006

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8. Exposure controls / personal protection

8.1 Personal protective equipment

Personal protective: Wear protective clothing.

Eye protection: Use safety glasses according to EN 166:2001. Hand protection: Wear protective gloves according to EN 374.

Respiratory protection: While filling wear dust mask or respiratory equipment with filter type particle filter P1

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TC-TUNGSTEN COMPOUNDS

according to DIN EN 143.

8.2 Environmental exposure controls

See section 6 and 7.

9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance

Physical state: solid or liquid (diluted in water)

Colour: white solid powder or light yellow-greenish liquid

Odour: neutral

Safety relevant basic data

pH-Value: about 3 at 20 °C

Melting point/freezing point: not determinable (decomposition)

Initial boiling point/boiling range: not applicable (solid) Flashpoint: not applicable

Flammability (solid, gas): not applicable
Explosive limits: not relevant
Vapour pressure: not relevant
Relative density: 5,47 g/cm³ at 20 °C

Viscosity: about 60 mPa•s (solution with density 3,1 g/cm³)

Bulk density: about 1570 kg/m 3 Solubility in water: > 1000 g/l at 20 $^{\circ}$ C

Surface tension: 73,4 mN/m at 20 °C and 1254 mg/l

Partition coefficient n-octanol / water: < -5,2 at 20 °C Auto-ignition temperature: not applicable

Explosive properties: none Oxidising properties: none

10. Stability and reactivity

10.1 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

10.2 Possibility of hazardous reactions

There are no expected hazardous reactions for intended use.

10.3 Hazardous decomposition products

In case of fire generation of tungsten trioxide.

11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: LD50 (oral, rat): 1715 mg/kg LD50 (dermal, rat): > 2000 mg/kg Skin corrosion/irritation: rabbit (exposition 4 h): not irritating

Eye damage/irritation: rabbit: causes serious eye damage

Sensitisation to respiratory tract/skin: guinea pig not sensitizing Mutagenicity: Ames-Test not mutagenic

according to Regulation (EC) No. 1907/2006

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12. Ecological information

12.1 Aquatic toxicity

 Fish:
 LC50 (96 h) Cyprinus carpio:
 420 mg/l

 Daphnie:
 EC50 (48 h) Daphnia magna:
 83 mg/l

 Algae:
 EC50 (72 h) Desmodesmus subspicatus:
 > 79 mg/l

12.2 Persistence and degradability

Not applicable

13. Disposal considerations

Waste treatment methods: Collect all materials for reuse, if possible. Contact manufacturer. Waste can be

disposed of in accordance with local regulations.

Packaging disposal: Disposal under conditions approved by the local authority.

Waste codes according to EWC / AVV: 51540

14. Transport information

14.1 Environmental threats

14.2 Special precautions for user

No dangerous goods. Keep separate from foodstuffs.

15. Regulatory information

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

National regulations:

Water hazard classification: WGK 2 (according to VwVwS, annex 4)

TRGS 900 (workplace limits): Tungsten compounds, soluble: 1 mg/m³ E (DK, 1, 25)

16. Other information

Relevant R-, H- and EUH-phrases (number and full text) which are mentioned in section 1 - 15:

According to Regulation 67/548/EEC: R22 Harmful if swallowed.

R41 Risk of serious damage to eyes.

R52-53 Harmful to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

According to Regulation (EC) No. 1272/2008: H302 Harmful if swallowed.

H318 Causes serious eye damage.

H412 Harmful to aquatic life with long lasting effects.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.