Tungsten, tris(acetonitrile)tricarbonyl- (cas 16800-47-8) MSDS

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifiers
Product name: Tris(acetonitrile)tricarbonyltungsten(0)
Product Number: 540706
Brand: 16800-47-8

1.2 Relevant identified uses of the substance or mixture and uses advised against
Identified uses: Laboratory chemicals, Manufacture of substances

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No 1272/2008 [EU-GHS/CLP]
- Acute toxicity, Inhalation (Category 1)
- Acute toxicity, Dermal (Category 2)
- Acute toxicity, Oral (Category 2)

Classification according to EU Directives 67/548/EEC or 1999/45/EC
Very toxic by inhalation, in contact with skin and if swallowed.

2.2 Label elements
Labelling according Regulation (EC) No 1272/2008 [CLP]

- Signal word: Danger
- Hazard statement(s):
  - H300: Fatal if swallowed.
  - H310: Fatal in contact with skin.
  - H330: Fatal if inhaled.
- Precautionary statement(s):
  - P260: Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
  - P264: Wash hands thoroughly after handling.
  - P280: Wear protective gloves/ protective clothing.
  - P284: Wear respiratory protection.
  - P302 + P350: IF ON SKIN: Gently wash with plenty of soap and water.

Supplemental Hazard Statements
- 540706
- P310: Immediately call a POISON CENTER or doctor/ physician.


R-phrase(s)
- R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.

S-phrase(s)
- S7/9: Keep container tightly closed and in a well-ventilated place.
- S28: After contact with skin, wash immediately with plenty of soap and water.
- S36/37: Wear suitable protective clothing and gloves.
- S45: In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

2.3 Other hazards - none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Synonyms: Tris(acetonitrile)tungsten(0)
Formula: C9H9N3O3W
Molecular Weight: 391.03 g/mol
4. **FIRST AID MEASURES**

4.1 **Description of first aid measures**

**General advice**
Consult a physician. Show this safety data sheet to the doctor in attendance.

- **If inhaled**
  If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

- **In case of skin contact**
  Wash off with soap and plenty of water. Take victim immediately to hospital. Consult a physician.

- **In case of eye contact**
  Flush eyes with water as a precaution.

- **If swallowed**
  Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

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

4.3 **Indication of any immediate medical attention and special treatment needed**
no data available

5. **FIREFIGHTING MEASURES**

5.1 **Extinguishing media**
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 **Special hazards arising from the substance or mixture**
Carbon oxides, nitrogen oxides (NOx), Tungsten oxide

5.3 **Advice for firefighters**
Wear self contained breathing apparatus for fire fighting if necessary.

5.4 **Further information**
no data available

6. **ACCIDENTAL RELEASE MEASURES**

6.1 **Personal precautions, protective equipment and emergency procedures**
Wear respiratory protection. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

6.2 **Environmental precautions**
Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 **Methods and materials for containment and cleaning up**
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

6.4 **Reference to other sections**
For disposal see section 13.

7. **HANDLING AND STORAGE**

7.1 **Precautions for safe handling**
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

7.2 **Conditions for safe storage, including any incompatibilities**
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

7.3 **Specific end uses**
no data available

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

8.1 **Control parameters**
Components with workplace control parameters

8.2 **Exposure controls**
Appropriate engineering controls
Avoid contact with skin, eyes and clothing. Wash hands before breaks and immediately after handling the product.

**Personal protective equipment**

**Eye/face protection**

Face shield and safety glasses Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Skin protection**

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

**Body Protection**

Complete suit protecting against chemicals. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Respiratory protection**

Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9. **PHYSICAL AND CHEMICAL PROPERTIES**

9.1 Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>a) Appearance</th>
<th>Form: powder</th>
</tr>
</thead>
<tbody>
<tr>
<td>b) Odour</td>
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</tr>
<tr>
<td>c) Odour Threshold</td>
<td>no data available</td>
</tr>
<tr>
<td>d) pH</td>
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</tr>
<tr>
<td>e) Melting point/freezing point</td>
<td>Melting point/range: &gt; 300 °C - lit.</td>
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<tr>
<td>f) Initial boiling point and boiling range</td>
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<tr>
<td>g) Flash point</td>
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<tr>
<td>h) Evaporation rate</td>
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</tr>
<tr>
<td>i) Flammability (solid, gas)</td>
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<tr>
<td>j) Upper/lower flammability or explosive limits</td>
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</tr>
<tr>
<td>k) Vapour pressure</td>
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</tr>
<tr>
<td>l) Vapour density</td>
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<tr>
<td>m) Relative density</td>
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<td>n) Water solubility</td>
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<td>p) Autoignition temperature</td>
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<td>q) Decomposition temperature</td>
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<td>r) Viscosity</td>
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<tr>
<td>s) Explosive properties</td>
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<tr>
<td>t) Oxidizing properties</td>
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</tbody>
</table>

9.2 Other safety information

no data available

10. **STABILITY AND REACTIVITY**

10.1 Reactivity

no data available

10.2 Chemical stability
10.3 Possibility of hazardous reactions
no data available

10.4 Conditions to avoid
no data available

10.5 Incompatible materials
Strong oxidizing agents

10.6 Hazardous decomposition products
Other decomposition products - no data available

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity
LD50 Intravenous - mouse - 56.2 mg/kg

Skin corrosion/irritation
no data available

Serious eye damage/eye irritation
no data available

Respiratory or skin sensitization
no data available

Germ cell mutagenicity
no data available

Carcinogenicity
IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
no data available

Specific target organ toxicity - single exposure
no data available

Specific target organ toxicity - repeated exposure
no data available

Aspiration hazard
no data available

Potential health effects

Inhalation May be fatal if inhaled. May cause respiratory tract irritation.

Ingestion May be fatal if swallowed.

Skin May be fatal if absorbed through skin. May cause skin irritation.

Eyes May cause eye irritation.

Additional Information
RTECS: YO7800000

12. ECOLOGICAL INFORMATION

12.1 Toxicity
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

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a
combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

**Contaminated packaging**
Dispose of as unused product.

### 14. TRANSPORT INFORMATION

#### 14.1 UN number
ADR/RID: 3466  
IMDG: 3466  
IATA: 3466

#### 14.2 UN proper shipping name
ADR/RID: METAL CARBONYLS, SOLID, N.O.S. (Tris(acetonitrile)tricarbonyltungsten)  
IMDG: METAL CARBONYLS, SOLID, N.O.S. (Tris(acetonitrile)tricarbonyltungsten)  
IATA: Metal carbonyls, solid, n.o.s. (Tris(acetonitrile)tricarbonyltungsten)

#### 14.3 Transport hazard class(es)
ADR/RID: 6.1  
IMDG: 6.1  
IATA: 6.1

#### 14.4 Packaging group
ADR/RID: I  
IMDG: I  
IATA: I

#### 14.5 Environmental hazards
ADR/RID: no  
IMDG: Marine pollutant: no  
IATA: no

#### 14.6 Special precautions for user
no data available

### 15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

#### 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
no data available

#### 15.2 Chemical Safety Assessment
no data available

### 16. OTHER INFORMATION

**Further information**
The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the resent state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. guidechem shall not be held liable for any damage resulting from handling or from contact with the above product. See reverse side of invoice or packing slip for additional terms and conditions of sale.