# SAFETY DATA SHEET

Tungsten Hexafluoride

## Section 1. Identification

<table>
<thead>
<tr>
<th>GHS product identifier</th>
<th>Tungsten Hexafluoride</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical name</td>
<td>tungsten hexafluoride</td>
</tr>
<tr>
<td>Other means of identification</td>
<td>Tungsten fluoride (WF6), (OC-6-11)-; Tungsten fluoride</td>
</tr>
<tr>
<td>Product use</td>
<td>Synthetic/Analytical chemistry.</td>
</tr>
<tr>
<td>Synonym</td>
<td>Tungsten fluoride (WF6), (OC-6-11)-; Tungsten fluoride</td>
</tr>
<tr>
<td>SDS #</td>
<td>001080</td>
</tr>
</tbody>
</table>
| Supplier's details     | Airgas USA, LLC and its affiliates  
                          259 North Radnor-Chester Road  
                          Suite 100  
                          Radnor, PA 19087-5283  
                          1-610-687-5253 |
| Emergency telephone number (with hours of operation) | 1-866-734-3438 |

## Section 2. Hazards identification

<table>
<thead>
<tr>
<th>OSHA/HCS status</th>
<th>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</th>
</tr>
</thead>
</table>
| Classification of the substance or mixture | GASES UNDER PRESSURE - Compressed gas  
| | ACUTE TOXICITY (inhalation) - Category 2  
| | SKIN CORROSION/IRRITATION - Category 1  
| | SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 1  
| | SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Respiratory tract irritation) - Category 3 |

**GHS label elements**

<table>
<thead>
<tr>
<th>Hazard pictograms</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>![Image]</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Danger</th>
</tr>
</thead>
</table>

| Hazard statements | Contains gas under pressure; may explode if heated.  
|                  | Fatal if inhaled.  
|                  | Causes severe skin burns and eye damage.  
|                  | Causes serious eye damage.  
|                  | May cause respiratory irritation. |

**Precautionary statements**

| General | Read and follow all Safety Data Sheets (SDS'S) before use. Read label before use.  
|         | Keep out of reach of children. If medical advice is needed, have product container or label at hand. Close valve after each use and when empty. Use equipment rated for cylinder pressure. Do not open valve until connected to equipment prepared for use. Use a back flow preventative device in the piping. Use only equipment of compatible materials of construction. |

| Prevention | Wear protective gloves. Wear eye or face protection. Wear respiratory protection. Use only outdoors or in a well-ventilated area. Do not breathe gas. Wash hands thoroughly after handling. Use and store only outdoors or in a well ventilated place. |

**Date of issue/Date of revision** : 5/20/2015.  
**Date of previous issue** : 10/20/2014.  
**Version** : 0.02  
1/13
Section 2. Hazards identification

Response: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or physician. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or physician.

Storage: Store locked up. Protect from sunlight. Protect from sunlight when ambient temperature exceeds 52°C/125°F. Store in a well-ventilated place.

Disposal: Dispose of contents and container in accordance with all local, regional, national and international regulations.

Hazards not otherwise classified: In addition to any other important health or physical hazards, this product may displace oxygen and cause rapid suffocation.

Section 3. Composition/information on ingredients

Substance/mixture: Substance
tungsten hexafluoride
Tungsten fluoride (WF6), (OC-6-11)-; Tungsten fluoride

CAS number/other identifiers
- CAS number: 7783-82-6
- Product code: 001080

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>%</th>
<th>CAS number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tungsten hexafluoride</td>
<td>100</td>
<td>7783-82-6</td>
</tr>
</tbody>
</table>

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

Eye contact: Get medical attention immediately. Call a poison center or physician. Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician.

Inhalation: Get medical attention immediately. Call a poison center or physician. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Skin contact: Get medical attention immediately. Call a poison center or physician. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 10 minutes. Chemical burns must be treated promptly by a physician. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Ingestion: As this product is a gas, refer to the inhalation section.
Section 4. First aid measures

**Most important symptoms/effects, acute and delayed**

<table>
<thead>
<tr>
<th>Potential acute health effects</th>
<th>Inhalation</th>
<th>Skin contact</th>
<th>Frostbite</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>Fatal if inhaled. May cause respiratory irritation.</td>
<td>Causes severe burns. Contact with rapidly expanding gas may cause burns or frostbite.</td>
<td>Try to warm up the frozen tissues and seek medical attention.</td>
<td>May cause burns to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.</td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Frostbite</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Over-exposure signs/symptoms**

<table>
<thead>
<tr>
<th>Potential acute health effects</th>
<th>Inhalation</th>
<th>Skin contact</th>
<th>Frostbite</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td>Adverse symptoms may include the following: pain, watering, redness.</td>
<td>Adverse symptoms may include the following: respiratory tract irritation, coughing</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td><strong>Skin contact</strong></td>
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<tr>
<td><strong>Frostbite</strong></td>
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<tr>
<td><strong>Ingestion</strong></td>
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</tbody>
</table>

**Indication of immediate medical attention and special treatment needed, if necessary**

<table>
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<tr>
<th>Potential acute health effects</th>
<th>Inhalation</th>
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<th>Ingestion</th>
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<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
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<tr>
<td><strong>Skin contact</strong></td>
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<tr>
<td><strong>Frostbite</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td></td>
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</tr>
</tbody>
</table>

**Notes to physician**

Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

**Specific treatments**

No specific treatment.

**Protection of first-aiders**

No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Wash contaminated clothing thoroughly with water before removing it, or wear gloves.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

**Extinguishing media**

<table>
<thead>
<tr>
<th>Potential acute health effects</th>
<th>Inhalation</th>
<th>Skin contact</th>
<th>Frostbite</th>
<th>Ingestion</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Eye contact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Inhalation</strong></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Skin contact</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Frostbite</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ingestion</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Suitable extinguishing media**

Use an extinguishing agent suitable for the surrounding fire.

**Unsuitable extinguishing media**

None known.

**Specific hazards arising from the chemical**

Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

**Hazardous thermal decomposition products**

Decomposition products may include the following materials: halogenated compounds, metal oxide/oxides.
### Section 5. Fire-fighting measures

**Special protective actions for fire-fighters**
- Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

**Special protective equipment for fire-fighters**
- Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

### Section 6. Accidental release measures

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

**For non-emergency personnel**
- No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not breathe gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

**For emergency responders**
- If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

**Environmental precautions**
- Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### Section 7. Handling and storage

#### Precautions for safe handling

**Protective measures**
- Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Do not breathe gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Use equipment rated for cylinder pressure. Close valve after each use and when empty. Protect cylinders from physical damage; do not drag, roll, slide, or drop. Use a suitable hand truck for cylinder movement.

**Advice on general occupational hygiene**
- Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

**Conditions for safe storage, including any incompatibilities**
- Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Keep container tightly closed and sealed until ready for use. Cylinders should be stored upright, with valve protection cap in place, and firmly secured to prevent falling or being knocked over. Cylinder temperatures should not exceed 52 °C (125 °F).
Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

<table>
<thead>
<tr>
<th>Ingredient name</th>
<th>Exposure limits</th>
</tr>
</thead>
</table>
| Tungsten hexafluoride   | OSHA PEL Z2 (United States, 11/2006).  
                          TWA: 2.5 mg/m³ 8 hours. Form: Dust  
                          STEL: 10 mg/m³, (as W) 15 minutes. Form: Insoluble  
                          TWA: 5 mg/m³, (as W) 8 hours. Form: Insoluble  
                          ACGIH TLV (United States, 3/2012). Notes: as W  
                          STEL: 10 mg/m³, (as W) 15 minutes. Form: Insoluble  
                          TWA: 5 mg/m³, (as W) 8 hours. Form: Insoluble  
                          OSHA PEL 1989 (United States, 3/1989). Notes: as W  
                          STEL: 10 mg/m³, (as W) 15 minutes. Form: Insoluble  
                          TWA: 5 mg/m³, (as W) 8 hours. Form: Insoluble  
                          ACGIH TLV (United States, 3/2012). Notes: as F  
                          TWA: 2.5 mg/m³, (as F) 8 hours.  
                          OSHA PEL (United States, 6/2010). Notes: as F  
                          TWA: 2.5 mg/m³, (as F) 8 hours.  
                          OSHA PEL 1989 (United States, 3/1989). Notes: as F  
                          TWA: 2.5 mg/m³, (as F) 8 hours. |

Appropriate engineering controls: Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required instead.

Date of issue/Date of revision: 5/20/2015. Date of previous issue: 10/20/2014. Version: 0.02
Section 8. Exposure controls/personal protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Appearance

Physical state: Gas.
Color: light yellow
Molecular weight: 297.83 g/mole
Molecular formula: F6-W
Boiling/condensation point: 17.3°C (63.1°F)
Melting/freezing point: 2.3°C (36.1°F)
Critical temperature: 169.83°C (337.7°F)
Odor: Not available.
Odor threshold: Not available.
pH: Not available.
Flash point: Not available.
 Burning time: Not applicable.
 Burning rate: Not applicable.
Evaporation rate: Not available.
Flammability (solid, gas): Not applicable.
Lower and upper explosive (flammable) limits: Not available.
Vapor pressure: 17.07 (psia)
Vapor density: (air=1): 10.6

Specific Volume (ft^3/lb): 1.2579
 Gas Density (lb/ft^3): 0.795
Relative density: Not applicable.
Solubility: Not available.
Solubility in water: Not available.
Partition coefficient: n-octanol/water: Not available.
Auto-ignition temperature: Not available.
Section 9. Physical and chemical properties

- Decomposition temperature: Not available.
- SADT: Not available.
- Viscosity: Not applicable.
- Physical/chemical properties comments: LIQUID DENSITY @ boiling point: 215 lb/ft³ (3430 kg/m³)
  SPECIFIC GRAVITY, LIQUID @ boiling point: 3.43

Section 10. Stability and reactivity

- Reactivity: No specific test data related to reactivity available for this product or its ingredients.
- Chemical stability: The product is stable.
- Possibility of hazardous reactions: Under normal conditions of storage and use, hazardous reactions will not occur.
- Conditions to avoid: No specific data.
- Incompatibility with various substances: Extremely reactive or incompatible with the following materials: moisture.
- Hazardous decomposition products: Under normal conditions of storage and use, hazardous decomposition products should not be produced.
- Hazardous polymerization: Under normal conditions of storage and use, hazardous polymerization will not occur.

Section 11. Toxicological information

Information on toxicological effects

- Acute toxicity
  - Tungsten hexafluoride
    - LC50 Inhalation Gas.
    - Rat
    - 218 ppm
    - 1 hours

- Irritation/Corrosion
  - Not available.
- Sensitization
  - Not available.
- Mutagenicity
  - Not available.
- Carcinogenicity
  - Not available.
- Reproductive toxicity
  - Not available.

Classification

<table>
<thead>
<tr>
<th>Product/ingredient name</th>
<th>OSHA</th>
<th>IARC</th>
<th>NTP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tungsten hexafluoride</td>
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<td>3</td>
<td>-</td>
</tr>
</tbody>
</table>

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Section 11. Toxicological information

Teratogenicity
Not available.

Specific target organ toxicity (single exposure)

<table>
<thead>
<tr>
<th>Name</th>
<th>Category</th>
<th>Route of exposure</th>
<th>Target organs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tungsten hexafluoride</td>
<td>Category 3</td>
<td>Not applicable.</td>
<td>Respiratory tract irritation</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure)
Not available.

Aspiration hazard
Not available.

Information on the likely routes of exposure
Not available.

Potential acute health effects

Eye contact
Causes serious eye damage. Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation
Fatal if inhaled. May cause respiratory irritation.

Skin contact
Causes severe burns. Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion
May cause burns to mouth, throat and stomach. As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact
Adverse symptoms may include the following:
- pain
- watering
- redness

Inhalation
Adverse symptoms may include the following:
- respiratory tract irritation
- coughing

Skin contact
Adverse symptoms may include the following:
- pain or irritation
- redness
- blistering may occur

Ingestion
Adverse symptoms may include the following:
- stomach pains

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure
Potential immediate effects
Not available.

Potential delayed effects
Not available.

Long term exposure
Potential immediate effects
Not available.

Potential delayed effects
Not available.

Potential chronic health effects
Not available.
Section 11. Toxicological information

**General**: No known significant effects or critical hazards.

**Carcinogenicity**: No known significant effects or critical hazards.

**Mutagenicity**: No known significant effects or critical hazards.

**Teratogenicity**: No known significant effects or critical hazards.

**Developmental effects**: No known significant effects or critical hazards.

**Fertility effects**: No known significant effects or critical hazards.

**Numerical measures of toxicity**

**Acute toxicity estimates**
Not available.

Section 12. Ecological information

**Toxicity**
Not available.

**Persistence and degradability**
Not available.

**Bioaccumulative potential**
Not available.

**Mobility in soil**

**Soil/water partition coefficient (K_{OC})**: Not available.

**Other adverse effects**: No known significant effects or critical hazards.

Section 13. Disposal considerations

**Disposal methods**: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Empty Airgas-owned pressure vessels should be returned to Airgas. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Do not puncture or incinerate container.
**Section 14. Transport information**

<table>
<thead>
<tr>
<th></th>
<th>DOT</th>
<th>TDG</th>
<th>Mexico</th>
<th>IMDG</th>
<th>IATA</th>
</tr>
</thead>
<tbody>
<tr>
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<td>UN2196</td>
<td>UN2196</td>
<td>UN2196</td>
<td>UN2196</td>
</tr>
<tr>
<td>UN proper shipping name</td>
<td>Tungsten Hexafluoride</td>
<td>Tungsten hexafluoride</td>
<td>Tungsten Hexafluoride</td>
<td>Tungsten Hexafluoride</td>
<td>Tungsten Hexafluoride</td>
</tr>
<tr>
<td>Transport hazard class(es)</td>
<td>2.3 (8)</td>
<td>2.3 (8)</td>
<td>2.3 (8)</td>
<td>2.3 (8)</td>
<td>2.3 (8)</td>
</tr>
<tr>
<td>Packing group</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Additional information</td>
<td>Inhalation hazard zone B</td>
<td>Explosive Limit and Limited Quantity Index 0</td>
<td>ERAP Index 25</td>
<td>Passenger Carrying Ship Index Forbidden</td>
<td>Passenger Carrying Road or Rail Index Forbidden</td>
</tr>
</tbody>
</table>

“Refer to CFR 49 (or authority having jurisdiction) to determine the information required for shipment of the product.”

**Special precautions for user** : Transport within user’s premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** : Not available.

**Section 15. Regulatory information**

**U.S. Federal regulations**

- TSCA 8(a) PAIR: tungsten hexafluoride
- TSCA 8(a) CDR Exempt/Partial exemption: Not determined
- United States inventory (TSCA 8b): This material is listed or exempted.

**Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed

**Clean Air Act Section 602 Class I Substances** : Not listed

**Clean Air Act Section 602 Class II Substances** : Not listed

**DEA List I Chemicals (Precursor Chemicals)** : Not listed

**Date of issue/Date of revision** : 5/20/2015.  **Date of previous issue** : 10/20/2014.  **Version** : 0.02 10/13
Section 15. Regulatory information

**DEA List II Chemicals**
(Essential Chemicals) : Not listed

**SARA 302/304**

**Composition/information on ingredients**

No products were found.

**SARA 304 RQ** : Not applicable.

**SARA 311/312**

**Classification** : Sudden release of pressure
Immediate (acute) health hazard

**Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Name</th>
<th>%</th>
<th>Fire hazard</th>
<th>Sudden release of pressure</th>
<th>Reactive</th>
<th>Immediate (acute) health hazard</th>
<th>Delayed (chronic) health hazard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tungsten hexafluoride</td>
<td>100</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
<td>Yes.</td>
<td>No.</td>
</tr>
</tbody>
</table>

**State regulations**

**Massachusetts** : This material is not listed.

**New York** : This material is not listed.

**New Jersey** : This material is listed.

**Pennsylvania** : This material is not listed.

**Canada inventory** : This material is listed or exempted.

**International regulations**

**International lists**

: Australia inventory (AICS): Not determined.

China inventory (IECSC): This material is listed or exempted.

Japan inventory: This material is listed or exempted.

Korea inventory: This material is listed or exempted.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): This material is listed or exempted.

Taiwan inventory (CSNN): Not determined.

**Chemical Weapons Convention List Schedule I Chemicals**

: Not listed

**Chemical Weapons Convention List Schedule II Chemicals**

: Not listed

**Chemical Weapons Convention List Schedule III Chemicals**

: Not listed

**Canada**

**WHMIS (Canada)**

: Class A: Compressed gas.

Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

**CEPA Toxic substances**: This material is listed.

**Canadian ARET**: This material is not listed.

**Canadian NPRI**: This material is not listed.

**Alberta Designated Substances**: This material is not listed.

**Ontario Designated Substances**: This material is not listed.

**Quebec Designated Substances**: This material is not listed.

**Date of issue/Date of revision** : 5/20/2015. **Date of previous issue** : 10/20/2014. **Version** : 0.02 11/13
Section 16. Other information

**Canada Label requirements**

- Class A: Compressed gas.
- Class D-1A: Material causing immediate and serious toxic effects (Very toxic).

**Hazardous Material Information System (U.S.A.)**

<table>
<thead>
<tr>
<th>Health</th>
<th>Flammability</th>
<th>Physical hazards</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs under 29 CFR 1910. 1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). HMIS® materials may be purchased exclusively from J. J. Keller (800) 327-6868.

The customer is responsible for determining the PPE code for this material.

**National Fire Protection Association (U.S.A.)**

<table>
<thead>
<tr>
<th>Flammability</th>
<th>Instability/Reactivity</th>
<th>Special</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

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Copyright ©2001, National Fire Protection Association, Quincy, MA 02269. This warning system is intended to be interpreted and applied only by properly trained individuals to identify fire, health and reactivity hazards of chemicals. The user is referred to certain limited number of chemicals with recommended classifications in NFPA 49 and NFPA 325, which would be used as a guideline only. Whether the chemicals are classified by NFPA or not, anyone using the 704 systems to classify chemicals does so at their own risk.

**History**

- **Date of printing**: 5/20/2015.
- **Date of issue/Date of revision**: 5/20/2015.
- **Date of previous issue**: 10/20/2014.
- **Version**: 0.02

**Key to abbreviations**

- ATE = Acute Toxicity Estimate
- BCF = Bioconcentration Factor
- GHS = Globally Harmonized System of Classification and Labelling of Chemicals
- IATA = International Air Transport Association
- IBC = Intermediate Bulk Container
- IMDG = International Maritime Dangerous Goods
- LogPow = logarithm of the octanol/water partition coefficient
- UN = United Nations
- ACGIH = American Conference of Governmental Industrial Hygienists
- AIHA = American Industrial Hygiene Association
- CAS = Chemical Abstract Services
- CEPA = Canadian Environmental Protection Act
- CERCLA = Comprehensive Environmental Response, Compensation, and Liability Act (EPA)
Section 16. Other information

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

References
Not available.