



INTATRADE  
**MATERIAL SAFETY DATA SHEET**  
according to 1907/2006/EC, Article 31

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## 1. IDENTIFICATION OF SUBSTANCE AND OF THE COMPANY

Product name: **Hexacarbonyltungsten**  
Product code: EO00819  
Company: INTATRADE Chemicals GmbH  
Bahnhofstr. 1  
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## 2. HAZARDS IDENTIFICATION

Hazard designation: T Toxic  
Information pertaining to particular  
Dangers for man and environment: R 23/25 Toxic by inhalation and if swallowed.  
Classification of the substance or mixture: According to Regulation (EC) No1272/2008  
Acute oral toxicity Category 3  
Acute Inhalation Toxicity - Dusts and Mists Category 3

GHS label elements:

**Danger**

Prevention: H301 - Toxic if swallowed.  
Response: H331 - Toxic if inhaled.  
P280 Wear protective clothing.  
P309 IF exposed or if you feel unwell:  
P310 Immediately call a POISON CENTER or doctor/physician.

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## 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical characterization  
Designation: Hexacarbonyltungsten  
CAS-No.: 14040-11-0  
EC-No.: 237-880-2

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## 4. FIRST AID MEASURES

General information Instantly remove any clothing soiled by the product.  
Remove breathing apparatus only after soiled clothing has been completely removed.  
After inhalation In case of irregular breathing or respiratory arrest provide artificial respiration.  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.  
After skin contact Seek immediate medical advice.  
Instantly wash with water and soap and rinse thoroughly.  
After eye contact Seek immediate medical advice.  
Rinse opened eye for several minutes under running water. Then consult doctor.

After swallowing Do not induce vomiting; instantly call for medical help.  
Seek immediate medical advice.

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## 5. FIRE FIGHTING MEASURES

Suitable extinguishing agents: CO<sub>2</sub>, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.

Special hazards caused by the material, its products of combustion or flue gases: Can be released in case of fire:  
Carbon monoxide and carbon dioxide, metal oxide

Protective equipment: Wear self-contained breathing apparatus.  
Wear full protective suit.

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## 6. ACCIDENTAL RELEASE MEASURES

Person-related safety precautions: Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation

Measures for environmental protection: Do not allow material to be released to the environment without proper governmental permits.

Measures for cleaning/collecting: Dispose of contaminated material as waste according to item 13.  
Ensure adequate ventilation.

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## 7. HANDLING AND STORAGE

Handling  
Information for safe handling: Keep containers tightly sealed.  
Store in cool, dry place in tightly closed containers.  
Ensure good ventilation/exhaustion at the workplace.  
Open and handle container with care.

Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.

Storage  
Requirements to be met by storerooms and containers: No special requirements.

Information about storage in one common storage facility: Store away from oxidizing agents.

Further information about storage conditions: Keep container tightly sealed.  
Store in cool, dry conditions in well sealed containers.  
Store in a locked cabinet or with access restricted to technical experts or their assistants.

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## 8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Additional information about design of technical systems: Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 100 feet per minute.

Components with critical values that require monitoring at the workplace:

	Tungsten and compounds (as W)	mg/m <sup>3</sup>
ACGIH TLV		1; 3-STEL (soluble compounds) 5; 10-STEL (insoluble compounds)
Belgium TWA		5; 10-STEL
Denmark TWA		5
Finland TWA		5
Korea TLV		5; 10-STEL
Netherlands MAC-TGG		5
Norway TWA		5

Poland TWA	5
Russia	2-STEL
Sweden NGV	5
Switzerland MAK-W	5
United Kingdom TWA	5; 10-STEL

#### Personal protective equipment

General protective and hygienic measures: The usual precautionary measures should be adhered to in handling the chemicals.

Keep away from foodstuffs, beverages and food.

Instantly remove any soiled and impregnated garments.

Wash hands during breaks and at the end of the work.

Store protective clothing separately.

Breathing equipment:

Use breathing protection with high concentrations.

Eye protection:

Safety glasses

Body protection:

Protective work clothing.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### General Information

Form: Crystalline powder

Colour: White

Smell: Nearly odourless

### Change in condition

Melting point/Melting range: 150°C

Boiling point/Boiling range: Not determined

Sublimation temperature / start: Not determined

Flash point:

200°C

Ignition temperature:

Not determined

Decomposition temperature:

Not determined

Danger of explosion:

Product is not explosive.

Critical values for explosion:

Lower: Not determined

Upper: Not determined

Steam pressure at 67°C:

1.596hPa

Density at 20°C:

2.65g/cm<sup>3</sup>

## 10. STABILITY AND REACTIVITY

Thermal decomposition / conditions

to be avoided:

No decomposition if used and stored according to specifications.

Materials to be avoided:

Oxidizing agents

Dangerous reactions:

No dangerous reactions known

Dangerous products of decomposition:

Carbon monoxide and carbon dioxide, metal oxide

## 11. TOXICOLOGICAL INFORMATION

Acute toxicity:

Primary irritant effect:

on the skin:

May cause irritation

on the eye:

May cause irritation

Sensitization:

No sensitizing effect known.

Additional toxicological information:

Danger by skin resorption.

To the best of our knowledge the acute and chronic toxicity of this substance is not fully known.

No classification data on carcinogenic properties of this material is available from the EPA, IARC, NTP, OSHA or ACGIH.

## 12. ECOLOGICAL INFORMATION

## Additional ecological information

### General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

Do not allow undiluted product or large quantities of it to reach ground water, water bodies or sewage system.

Do not allow material to be released to the environment without proper governmental permits.

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## 13. DISPOSAL CONSIDERATIONS

### Product

#### Recommendation:

Consult state, local or national regulations for proper disposal.

Hand over to disposers of hazardous waste.

Must be specially treated under adherence to official regulations.

### Uncleaned packagings

#### Recommendation:

Disposal must be made according to official regulations.

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## 14. TRANSPORT INFORMATION

Land transport ADR/RID and GGVS/GGVE (cross-border/domestic)

ADR/RID-GGVS/E Class: 6.1 (T3) Toxic substances.

Kemler Number: 60

UN-Number: 3466

Packaging group: III

Label: 6.1

Designation of goods: 3466 METAL CARBONYLS, SOLID, N.O.S.  
(Hexacarbonyltungsten)

Limited quantities (LQ) LQ9

Transport category 2

Tunnel restriction code E

Maritime transport IMDG/GGVSea:

IMDG/GGVSea Class: 6.1

UN Number: 3466

Label: 6.1

Packaging group: III

Marine pollutant: No

Correct technical name: METAL CARBONYLS, SOLID, N.O.S. (Hexacarbonyltungsten)

Air transport ICAO-TI and IATA-DGR:

ICAO/IATA Class: 6.1

UN/ID Number: 3466

Label: 6.1

Packaging group: III

Correct technical name: METAL CARBONYLS, SOLID, N.O.S. (Hexacarbonyltungsten)

UN "Model Regulation":

UN3466, METAL CARBONYLS, SOLID, N.O.S., 6.1, III

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## 15. REGULATORY INFORMATION

Designation according to EC guidelines

Code letter and hazard designation of product:

T Toxic

Risk phrases: 23/25 Toxic by inhalation and if swallowed.

Safety phrases: 36 Wear suitable protective clothing.

45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

National regulations

Information about limitation of use:

Employment restrictions concerning young persons must be observed.

For use only by technically qualified individuals.

Water hazard class:

Water hazard class 1 (Self-assessment): slightly hazardous for water.

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## **16. OTHER INFORMATION**

### Warranty

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 present 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. Intatrade Chemicals GmbH shall not be held liable for any damage resulting from handling or from contact with the above product.