

# MATERIAL SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006



## Conflict-Free Tantalite Concentrate™

Version 3.0

Revision Date 1.1.2021

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

#### 1.1 Product identifier

Trade name : Conflict-Free Tantalite Concentrate™  
Product name : Tantalum Ore – Tantalum Pentoxide (Ta2O5)

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

Use of the Substance/Mixture : Electrical Industry and Electronics

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

Company : OVERAX Technologies, a.s.  
Roháčova 145/14  
130 00 Praha  
Czech Republic

Telephone : +420 533 039 072

#### 1.4 Emergency telephone number

Responsible department : Department of Operations  
E-mail address : info@overax.eu  
Emergency telephone : +420 533 039 072/+420 734 314 201

### SECTION 2: Hazards identification

#### 2.1 Classification of the substance or mixture

Tantalum Ore : This ore is not considered to be persistent, bioaccumulating nor toxic (PBT).

### SECTION 3: Composition/information on ingredients

#### 3.1 Substances

Chemical nature : Ore

Chemical Name	CAS-No. EINECS-No./ELINCS No.	Concentration [%]
Tantalum	7440-25-7 231-135-5	20.00 to 40.00

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Niobium	7440-03-1 231-113-5	10.00 to 30.00
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### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice	: First aider needs to protect himself.
If inhaled	: Remove to fresh air. If symptoms persist, call a physician.
In case of skin contact	: Wash off with soap and water. If skin irritation occurs, seek medical advice/attention.
In case of eye contact	: Rinse with plenty of water If eye irritation persists, consult a specialist.
If swallowed	: Clean mouth with water and drink afterwards plenty of water. Obtain medical attention.

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

Symptoms	: No information available
Risks	: No information available

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

Treatment	: No information available
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### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media	: Special powder against metal fire, Sand, Dry sodium chloride
Unsuitable extinguishing media	: Carbon dioxide (CO <sub>2</sub> ), Water

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

Specific hazards during firefighting : None known.

### 5.3 Advice for firefighters

Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

Further information : None known.

## SECTION 6: Accidental release measures

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

Personal precautions : Remove all sources of ignition.  
Use personal protective equipment.  
Avoid dust formation.  
Avoid dust accumulation in enclosed space.

### 6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

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

Methods for cleaning up : Use mechanical handling equipment.  
Avoid dust formation.  
Pick up and transfer to properly labelled containers.

### 6.4 Reference to other sections

For personal protection see section 8.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

Advice on safe handling : Avoid dust formation. Provide sufficient air exchange and/or exhaust in work rooms. Avoid exceeding of the given occupational exposure limits (see section 8).

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Advise on protection against fire : Keep away from open flames and hot surfaces.  
and explosion

Hygiene measures : Handle in accordance with good industrial hygiene and safety  
practice. Keep working clothes separately.

### 7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas : Store in accordance with the particular national regulations.  
and containers

Further information on storage : Storage in tightly closed containers in a dry place.  
conditions

### 7.3. Specific end use(s)

Specific use(s) : no data available

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
Tantalum	7440-25-7	TWA	5 mg/m <sup>3</sup>	2005-04-06	GB EH40
		STEL	10 mg/m <sup>3</sup>	2005-04-06	GB EH40

#### DNEL

Tantalum : End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Long-term systemic effects  
Value: 5 mg/m<sup>3</sup>

End Use: Workers  
Exposure routes: Inhalation  
Potential health effects: Acute systemic effects  
Value: 10 mg/m<sup>3</sup>

#### PNEC

Tantalum : no data available

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### 8.2. Exposure controls

#### Engineering measures

Dust should be extracted directly at the point of origin

#### Personal protective equipment

Eye protection : Safety glasses

Hand protection : Protective gloves to prevent mechanical irritation

Skin and body protection : Workers should wear antistatic footwear

Respiratory protection : Respirator must be worn if exposed to dust  
Recommended Filter type:  
Respiratory protection complying with EN 143

#### Environmental exposure controls

General advice : No special environmental precautions required

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Appearance	: ore
Color	: grey / black
Odor	: odorless
Odor Threshold	: no data available
pH	: ca. 7, at 20 °C Method: DIN 51082
Melting point/range	: 2,996 °C
Boiling point/range	: 5,425 °C
Flash point	: not applicable

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Evaporation rate	: not applicable
Lower explosion limit	: no data available
Upper explosion limit	: no data available
Vapor pressure	: not applicable
Relative vapor density	: Remarks: not applicable
Density	: max 7.9 g/cm <sup>3</sup>
Water solubility	: < 0.010 g/l at 20 °C Method: Directive 67/548/EEC Annex V, A.6 Flask method.
Auto-ignition temperature	: not applicable
Thermal decomposition	: not applicable
Viscosity, dynamic	: not applicable
Viscosity, kinematic	: not applicable
Oxidizing properties	: The ore or mixture is not classified as oxidizing

### 10. Stability and reactivity

#### 10.1 Reactivity

No hazards to be specially mentioned.

#### 10.2 Chemical stability

Stable under normal conditions.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : None known.

#### 10.4 Incompatible materials

Materials to avoid : Incompatible with acids.

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### 10.5. Hazardous decomposition products

Hazardous decomposition products :

Other information : not applicable.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effect

#### Components:

##### **Tantalum:**

Acute oral toxicity : The ore or mixture has no acute oral toxicity

Acute inhalation toxicity : The ore or mixture has no acute inhalation toxicity

Acute dermal toxicity : The ore or mixture has no acute dermal toxicity

Skin corrosion/irritation : Negligible skin irritation

Serious eye damage/irritation : Mild eye irritation

Respiratory or skin sensitization : Does not cause skin sensitization

Germ cell mutagenicity

Genotoxicity in vitro : In vitro tests did not show mutagenic effects

Genotoxicity in vivo : no data available

Carcinogenicity : no data available

Reproductive toxicity : no data available

Teratogenicity : no data available

STOT – single exposure : Assessment: The ore or mixture is not classified as specific target organ toxicant, single exposure.

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Repeated dose toxicity	: Remarks: no data available
STOT – repeated exposure	: Assessment: The ore or mixture is not classified as specific target organ toxicant, repeated exposure.
Further information	: None known.

## SECTION 12: Ecological information

### 12.1. Toxicity

#### Components:

##### **Tantalum:**

Toxicity to fish : no data available

Toxicity to daphnia and other aquatic invertebrates : no data available

Toxicity to algae : no data available

Toxicity to bacteria : no data available

Toxicity to fish (Chronic toxicity) : no data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : no data available

Toxicity to soil dwelling organisms : no data available

Plant toxicity : no data available

Toxicity to terrestrial organisms : no data available

### 12.2. Persistence and degradability

#### Components:

##### **Tantalum:**

Biodegradability : The methods for determining biodegradability are not applicable to inorganic substances.



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Stability in water : no data available

### 12.3. Bioaccumulative potential

#### Components:

##### **Tantalum:**

Bioaccumulation : This ore is not considered to be persistent, bioaccumulating nor toxic (PBT).

Partition coefficient: n-octanol/water : not applicable

### 12.4. Mobility in soil

#### Components:

##### **Tantalum:**

Mobility : no data available

### 12.5. Results of PBT and vPvB assessment

#### Components:

##### **Tantalum:**

Assessment : This ore is not considered to be persistent, bioaccumulating nor toxic (PBT).

### 12.6. Other adverse effects

#### Components:

##### **Tantalum:**

Ozone-Depletion Potential : no data available

Additional ecological information: None known.

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## SECTION 13. Disposal considerations

### 13.1. Waste treatment methods

Product : In accordance with local and national regulations.

This product cannot be classified with disposal identification key acc. To the EU disposal directives as a classification results from the

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intended utilization purpose of the consumer.

### SECTION 14: Transport information

Shipping Regulations	: Not regulated
UN Number	: Not regulated
UN Proper Shipping Name	: Not regulated
Transport Hazard Class	: Not regulated
Packing Group	: Not regulated
Marine Pollutant	: Not regulated

### SECTION 15: Regulatory information

OSHA STATUS	: No specific regulations. The Hazard Communication Standard of the Occupational Safety and Health Administration, 29 CFR 1910.1200, considers components of this product a Hazardous Substance.
EUROPEAN UNION	: Risk Phrase N/A

### SECTION 16: Other information

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.