

# SAFETY DATA SHEET

<b>Product Name:</b>	<b>TANTALUM</b>	<b>SDS Reference</b>	
<b>Version No.</b> 2	<b>Initial issue date</b> 09-12-2009	<b>Revision date</b>	Mar 2011

## 1. IDENTIFICATION OF SUBSTANCE / PREPARATION AND OF THE COMPANY

<b>Product Name</b>	TANTALUM		
<b>REACH Pre-registration No.</b>	05-2115271835-39-0000		
<b>REACH Registration No.</b>	Not applicable – anticipated registration date 2018		
<b>Use (s)</b>	Various Industrial Products		
<b>Supplier Details</b>	Wogen Resources Ltd., 4 The Sanctuary, Westminster, London SW1P 3JS		<b>Telephone</b> +44 (0) 20 7222 3521
<b>Emergency Telephone</b>	See local directory	<b>Competent Person e-mail:</b> danny.landau@wogen.com	

## 2. HAZARDS IDENTIFICATION

<b>Physical &amp; Chemical:</b>	Not a hazardous substance or preparation according to EC-directives 67/548/EEC or 99/45/EC and their various amendments and adaptations.
<b>Health:</b>	<b>Eye Contact:</b> Metal dusts may cause mechanical irritation. <b>Skin Contact:</b> Metal dusts may cause mechanical irritation. <b>Inhalation:</b> Dust may be irritating to respiratory tract. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. See also Section 8. <b>Ingestion:</b> Health injuries are not known or expected under normal use. Low hazard for usual industrial or commercial handling. <b>Carcinogenic Effects:</b> Does not contain any substances listed by IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACCGIH (American Conference for Governmental Industrial Hygienists) or EU (European Union). See also Section 11. <b>Target Organ Effects:</b> Lungs, Eyes, Skin. Medical Conditions Aggravated by Exposure: Asthma, Respiratory disorder.
<b>Environmental:</b>	No special environmental precautions required. See also Section 12.

## 3. COMPOSITION / INFORMATION ON INGREDIENTS

<b>Chemical Characterisation</b>	TANTALUM			
<b>Chemical name</b>	<b>CAS-No</b>	<b>EINECS/ELINCS</b>	<b>Classification</b>	<b>Concentration</b>
TANTALUM	7440-25-7	231-135-5	F (powder form)	100%

## 4. FIRST AID MEASURES

<b>Inhalation</b>	If cough, shortness of breath or other breathing problems occur, move to fresh air. Seek medical attention if symptoms persist. If necessary, restore normal breathing through standard first aid measures.
<b>Skin contact</b>	Wash thoroughly with soap and water. Seek medical attention if redness, swelling, itching, or burning occurs.
<b>Eye contact</b>	Flush eyes immediately with large amounts of water for 15 minutes. Seek medical attention if redness, swelling, itching, burning or visual disturbances occur.
<b>Ingestion</b>	Do not induce vomiting. If conscious, give several glasses of water. Never give anything by mouth to an unconscious person.

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### 5. FIRE FIGHTING MEASURES

<b>Hazardous Decomposition and/or Combustion Products</b>	Miscellaneous thermal decomposition products.
<b>Extinguishing media</b>	Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
<b>Extinguishing media not to be used</b>	Not available
<b>Special exposure hazards</b>	Negligible fire and explosion hazard in bulk form. Dust/air mixture may ignite or explode. May ignite or explode when exposed to heat or flames.
<b>Protective equipment</b>	Wear suitable protective equipment. In the event of fire, wear self-contained breathing apparatus.
<b>Risk of Dust Explosion</b>	Powdered material may form explosive dust-air mixtures.

### 6. ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions</b>	Ensure adequate ventilation. Use personal protective equipment. Avoid dust formation. See also Section 8.
<b>Methods for cleaning up</b>	Collect spilled material in appropriate container for disposal. Pick up and transfer to properly labelled containers. See Section 13.
<b>Environmental considerations</b>	No special environmental precautions required. Local authorities should be advised if significant spillages cannot be contained.

### 7. HANDLING & STORAGE

<b>Advice on safe handling</b>	Avoid contact with skin and eyes. Do not breathe dust. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated. Take precautionary measures against static discharge. All metal parts of the mixing and processing equipment must be earthed/grounded. Ensure all equipment is electrically earthed/grounded before beginning transfer operations. Fine dust is capable of penetrating electrical equipment and may cause electrical shorts.
<b>Storage conditions</b>	Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat and sources of ignition. Do not store together with strong oxidizing agents. Keep in properly labelled containers.

### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

<b>Exposure controls</b>	Not available.
<b>Engineering controls</b>	Ensure adequate ventilation to maintain exposures below occupational limits. Provide appropriate exhaust ventilation at machinery and at places where dust can be generated.
<b>Hand Protection</b>	Wear appropriate chemical resistant gloves.
<b>Eye protection</b>	Wear eye/face protection. Safety glasses with side-shields. Goggles.
<b>Skin protection</b>	Wear suitable protective clothing.
<b>Respiratory protection</b>	Approved respirator may be necessary if local exhaust ventilation is not adequate.
<b>Other protection</b>	Handle in accordance with good industrial hygiene and safety practice. Emergency eyewash and safety shower should be located nearby.

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<b>9. PHYSICAL &amp; CHEMICAL PROPERTIES</b>
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<b>Appearance</b>	Grey Metal
<b>Colour</b>	Grey
<b>Odour</b>	None
<b>pH</b>	Not applicable
<b>Boiling pt / range</b>	5429 °C
<b>Melting pt / range</b>	2996 °C
<b>Flash point</b>	Not determined
<b>Specific gravity</b>	Not available
<b>Vapour pressure</b>	1 kpa @ 3024 °C
<b>Water solubility</b>	Insoluble
<b>Solvent Solubility</b>	Soluble in: Hydrofluoric acid, fused alkali, fuming sulphuric acid, nitric acid/hydrofluoric acid mixtures. Insoluble in: acids, alkali
<b>Minimum Ignition Temperature</b>	630 °C (dust cloud); 300 °C (dust layer)
<b>Explosion Limits in Air – Upper (%)</b>	Not determined
<b>Lower (%)</b>	<200 g/m <sup>3</sup> (powder)

<b>10. STABILITY &amp; REACTIVITY</b>
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<b>Stability</b>	Stable
<b>Conditions to avoid</b>	Keep away from heat and sources of ignition. Avoid dust formation. Incompatible with: halogens, oxidizing materials, acids.
<b>Material to avoid</b>	TANTALUM Incompatibilities: Bromine Trifluoride: Incandescent reaction. Fluorine: Ignites on contact. Lead Chromate: May react explosively. Mineral Acids: Incompatible. Oxidizers (Strong): Fire and explosion hazard. Sulfur Trioxide: Incompatible.
<b>Hazardous Polymerization</b>	Hazardous polymerization does not occur.
<b>Hazardous decomposition products</b>	Miscellaneous thermal decomposition products.
<b>Mechanical Sensitivity (shock)</b>	Not sensitive to mechanical impact.
<b>Static Discharge Effects</b>	Take precautionary measures against static discharges.

<b>11. TOXICOLOGICAL INFORMATION</b>
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<b>Acute toxicity</b>	Not determined
<b>Subchronic toxicity</b>	Not determined
<b>Chronic toxicity</b>	Carcinogenic Effects: Does not contain any substances listed by IARC (International Agency for Research on Cancer), NTP (National Toxicology Program), OSHA (Occupational Safety and Health Administration), ACCGIH (American Conference for Governmental Industrial Hygienists) or EU (European Union).

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<b>11. TOXICOLOGICAL INFORMATION</b>
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<b>Mutagenic Effects</b>	Not determined.
<b>Reproductive Toxicity</b>	Not determined.
<b>Sensitizing Effects</b>	Contains no known sensitizers.
<b>Synergistic Materials</b>	None reasonably foreseeable.

<b>12. ECOLOGICAL INFORMATION</b>
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<b>Aquatic toxicity</b>	Not determined	mg/l
<b>Mobility</b>	Not expected to migrate. Insoluble.	
<b>Bioaccumulation</b>	Not determined.	
<b>Persistence/Degradability</b>	Not determined.	
<b>Distribution to Environmental Compartments</b>	Not determined.	

<b>13. DISPOSAL CONSIDERATIONS</b>
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<b>Advice on disposal</b>	Product, as supplied, should be disposed of in accordance with the regulations issued by the appropriate federal, state, and local authorities. Same consideration should be given to containers and packaging.
<b>Contaminated packaging</b>	Not available.

<b>14. TRANSPORT INFORMATION</b>
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<b>United Nations number</b>	Not available.
<b>Marine pollutant</b>	Not available.
<b>Further information</b>	Not classified as dangerous in the meaning of transport regulations.

<b>15. REGULATORY INFORMATION</b>
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<b>Indication of danger</b>	Not a hazardous substance or preparation according to EC-directive 67/548/EEC or 99/45/EC and their various amendments and adaptations.
<b>International Inventories</b>	<p>All components of this product are listed on or exempt from the following inventories:</p> <p>YES - Australian Inventory of Chemical Substances (AICS)</p> <p>YES - Canadian Domestic Substance List (DSL)</p> <p>YES - Chinese Inventory</p> <p>YES - European Inventory of Existing Commercial Chemical Substances (EINECS)</p> <p>YES - Japanese Existing and New Chemical Substances (ENCS)</p> <p>YES - Korean Existing Chemicals List (KECL)</p> <p>NO - New Zealand Hazardous Substances and New Organisms Act (HSNO)</p> <p>YES - Philippine Inventory of Chemicals and Chemical Substances (PICCS)</p> <p>YES - United States Toxic Substances Control Act (TSCA) Inventory</p>

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**16. OTHER INFORMATION**

**Further information**

**Sources of data**

**Date of issue**                      March 2011

**This information is based on our present state of knowledge and is intended to describe our products from the point of view of the safety requirements. It should not be construed as guaranteeing specific properties.**