



# SAFETY DATA SHEET

**MATERION**

## 1. Product and company identification

**Product name** Tantalum  
**Manufacturer/Supplier** Materion Advanced Materials Group  
**Address** 42 Mt. Ebo Road South  
Brewster, NY 10509  
United States  
**Telephone** Supplier Phone 1+845.279.0900  
**e-mail** Not available.  
**Contact person**  
**Emergency telephone number** Chemtrec 1+703.527.3887

### Recommended use and Limitations on use

**Recommended use** Not available.  
**SDS number** 31

## 2. Hazards identification

### GHS classification

**Physical hazards** Flammable solids Category 2  
**Health hazards** Not classified.  
**Environmental hazards** Not classified.

### Label elements

**Symbols** None.  
**Signal word** None.  
**Hazard statement** None.

## 3. Composition/information on ingredients

**Substance or mixture** Substance

Chemical property	CAS Number	Concentration (%)
Tantalum	7440-25-7	99.9 - 100

## 4. First aid measures

**Inhalation** Not available.  
**Skin contact** Not available.  
**Eye contact** Not available.  
**Ingestion** Not available.  
**Potential delayed effects** Not available.  
**Personal protection for first-aid responders** Not available.  
**Notes to physician** Not available.

## 5. Fire-fighting measures

**Extinguishing media** DRY sand, sodium chloride powder, graphite powder or Met-L-X powder.  
**Extinguishing media to avoid** None.  
**HAZCHEM Code Number** None.  
**Specific hazards during fire fighting** None.  
**Special fire fighting procedures** Not available.  
**Protection of fire-fighters** Not available.  
**Hazards from combustion products** None.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Not available.
<b>Environmental precautions</b>	Not available.
<b>Spill cleanup methods</b>	Not available.

## 7. Handling and storage

### Handling

<b>Precautions</b>	Not available.
<b>Safe handling advice</b>	Not available.
<b>Prevention of fire and explosion</b>	Not available.

### Storage

<b>Suitable storage conditions</b>	Not available.
<b>Incompatible materials</b>	Not available.

## 8. Exposure controls/personal protection

### Exposure limits

#### New Zealand. WES. (Workplace Exposure Standards)

<b>Material</b>	<b>Type</b>	<b>Value</b>
Tantalum	TWA	5 mg/m <sup>3</sup>
<b>Components</b>	<b>Type</b>	<b>Value</b>
Tantalum (CAS 7440-25-7)	TWA	5 mg/m <sup>3</sup>

#### UK. EH40 Workplace Exposure Limits (WELs)

<b>Material</b>	<b>Type</b>	<b>Value</b>
Tantalum	STEL	10 mg/m <sup>3</sup>
	TWA	5 mg/m <sup>3</sup>
<b>Components</b>	<b>Type</b>	<b>Value</b>
Tantalum (CAS 7440-25-7)	STEL	10 mg/m <sup>3</sup>
	TWA	5 mg/m <sup>3</sup>

#### Australia. National Workplace OELs (Workplace Exposure Standards for Airborne Contaminants, Appendix A)

<b>Material</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Tantalum	TWA	5 mg/m <sup>3</sup>	Dust.
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Tantalum (CAS 7440-25-7)	TWA	5 mg/m <sup>3</sup>	Dust.

#### Australia. OELs. (Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment)

<b>Material</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Tantalum	TWA	5 mg/m <sup>3</sup>	Dust.
<b>Components</b>	<b>Type</b>	<b>Value</b>	<b>Form</b>
Tantalum (CAS 7440-25-7)	TWA	5 mg/m <sup>3</sup>	Dust.

**Biological limit values** No biological exposure limits noted for the ingredient(s).

### Engineering controls

#### Personal protective equipment

<b>Respiratory protection</b>	Not available.
<b>Skin protection</b>	Not available.
<b>Eye/face protection</b>	Not available.
<b>Radioactive or thermal hazards</b>	Not available.
<b>Hygiene measures</b>	Not available.

## 9. Physical and chemical properties

### Appearance

<b>Physical state</b>	Solid.
<b>Form</b>	Not available.

<b>Colour</b>	Not available.
<b>Odour</b>	Not applicable.
<b>Odour threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	2996 °C (5424.8 °F) estimated 2996 °C (5424.8 °F)
<b>Boiling point, initial boiling point, and boiling range</b>	5429 °C (9804.2 °F) estimated  5429 °C (9804.2 °F)
<b>Flash point</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Flammability (solid, gas)</b>	Not applicable.
<b>Flammability limit - lower (%)</b>	Not available.
<b>Flammability limit - upper (%)</b>	Not available.
<b>Explosive limit - lower (%)</b>	Not available.
<b>Explosive limit – upper (%)</b>	Not available.
<b>Vapour pressure</b>	< 0.0000001 kPa at 25 °C 0.00001 hPa estimated
<b>Vapour density</b>	Not available.
<b>Evaporation rate</b>	Not available.
<b>Relative density</b>	Not available.
<b>Density</b>	15.55 g/cm <sup>3</sup> estimated 14.49 g/cm <sup>3</sup> 16.60 g/cm <sup>3</sup>
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Insoluble
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Decomposition temperature</b>	Not available.
<b>Molecular weight</b>	180.95 g/mol
<b>Other data</b>	
<b>Molecular formula</b>	Ta
<b>Specific gravity</b>	15.55 estimated 14.49 16.6

## 10. Stability and reactivity

<b>Stability</b>	None.
<b>Conditions to avoid</b>	None.
<b>Incompatible materials</b>	None.
<b>Hazardous decomposition products</b>	None.
<b>Possibility of hazardous reactions</b>	None.

## 11. Toxicological information

<b>Acute toxicity</b>	Not available.
<b>Information on likely routes of exposure</b>	
<b>Ingestion</b>	Not available.
<b>Inhalation</b>	Not available.
<b>Skin contact</b>	Not available.
<b>Eye contact</b>	Not available.
<b>Routes of exposure</b>	Not available.
<b>Symptoms</b>	Not available.

<b>Skin corrosion/irritation</b>	Not available.
<b>Serious eye damage/eye irritation</b>	Not available.
<b>Skin sensitiser</b>	Not available.
<b>Chronic effects</b>	Not available.
<b>Relevant negative data</b>	Not available.

## 12. Ecological information

<b>Ecotoxicity</b>	Not available.
<b>Persistence and degradability</b>	Not available.
<b>Bioaccumulation</b>	Not available.
<b>Partition coefficient n-octanol/water (log Kow)</b>	Not available.
<b>Bioconcentration factor (BCF)</b>	Not available.
<b>Mobility</b>	Not available.
<b>Other hazardous effects</b>	Not available.

## 13. Disposal considerations

<b>Disposal methods/information</b>	Not available.
<b>Special precautions</b>	Not available.

## 14. Transport information

### IATA

Not regulated as dangerous goods.

### IMDG

Not regulated as dangerous goods.

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

## 15. Regulatory information

### Applicable regulations

#### New Zealand Inventory of Chemicals (NZIoC): Registration status

Tantalum (CAS 7440-25-7)

May be used as a single component chemical under an appropriate group standard

## 16. Other information

**References** Not available.

### Issued by

Not available.

### Prepared by

Not available.

### Issue date

27-May-2015

### Revision Information

Product and Company Identification: Product Review  
 Hazards Identification: Shared US and Canadian Categories  
 Composition / Information on Ingredients: Ingredients