

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

1 IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY / UNDERTAKING

Product name	Tantalum powder
Product code	NM-0036
CAS	7440-25-7
REACH No.	A registration number is not available for this substance as the substance or its uses are exempted from registration, the annual tonnage does not require a registration or the registration is envisaged for a later registration deadline.
Identified uses	Laboratory chemicals, Manufacture of substances
Supplier	IoLiTec Ionic Liquids Technologies GmbH Salzstrasse 184 D – 74076 Heilbronn Germany
Telephone	+49 (0)7131-89839-0
Fax	+49 (0)7131-89839-109
Emergency telephone	+49 (0)176-84850874
Email	msds@iolitec.de

2 HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification (REGULTATION (EC) No 1272/2008)

Flammable solids, Category 1, H228

Specific Target Organ Toxicity - Single exposure: Respiratory tract irritation,
Category 3, H335

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

Classification (67/548/EEC or 1999/45/EC)

Flammable metal powder

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008, GHS)

Pictogram



Signal word

Danger

Hazard statement(s)

H228

Flammable solid.

H335

May cause respiratory irritation.

Precautionary statement(s)

P210

Keep away from heat/sparks/open flames/hot surfaces . - No smoking.

P261

Avoid breathing dust/fume/gas/mist/vapours/spray.

P370 + P378

In case of fire: Use sand or fire extinguisher class D for extinction.

P422

Store contents under nitrogen or argon.

Caution - substance not yet tested completely.

Supplemental Hazard Statements none

Labelling (67/548/EEC or 1999/45/EC)

Hazard symbol(s)



R-phrase(s)

R11

Highly flammable.

R36/37/38

Irritating to eyes, respiratory system and skin.

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

S-phrases(s)

S26

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39

Wear suitable protective clothing, gloves and eye/face protection.

Caution - substance not yet tested completely.

3 COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient name

Tantalum

Contents

99+%

Health(Class)

Substance not yet fully tested!

Risk(R/No.)

Formula

Ta

Molecular Weight

180.95 g/mol

4 FIRST AID MEASURES

General

Contaminated clothing should be removed and washed before being reused.

Inhalation

Move the exposed person to fresh air at once. If respiratory problems, artificial respiration/oxygen.

Skin

Wash the skin immediately with water.

Eyes

Promptly wash eyes with plenty of water while lifting the eye lids. Get medical attention immediately. Continue to rinse for at least 15 minutes.

If swallowed

Do not induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

5 FIRE FIGHTING MEASURES

Extinguishing media	Use sand or fire extinguisher class D for extinction
Protective measures in fire	Wear self-contained breathing apparatus and protective clothing.

6 ACCIDENTAL RELEASE MEASURES

Personal precautions during spill	Evacuate area. Shut off all heat or ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Wear self-contained breathing apparatus, rubber boots and gloves.
Spill cleanup methods	Avoid contact with skin or inhalation of spillage, dust or vapor, Avoid dust formation. Collect and reclaim or dispose in sealed containers in license waste.

7 HANDLING AND STORAGE

Usage precautions	Handle under dry protective gas. Avoid contact with eyes, skin and clothing. Keep away from heat, sparks and open flame. Do not use in confined spaces without adequate ventilation and/or respirator.
Storage precautions	Store in a closed container in a cool, dry, well ventilated area. Protect against electrostatic charges. Store contents under inert gas (nitrogen or argon).

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

8 EXPOSURE CONTROLS AND PERSONAL PROTECTION

Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Body Protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Solid
Color	gray
Odor/taste	No characteristic odor.
Melting Point	2996 °C
Boiling Point	5425 °C
Flammability	Highly flammable
Density	16.69 g/cm ³
Water	Insoluble

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

10 STABILITY AND REACTIVITY

Stability No particular stability concerns if handled according to specifications. Oxidizes at elevated temperatures.

Conditions to avoid Oxidizing agents

Hazardous Decomposition Products Hazardous decomposition products formed under fire conditions. Tantalum Oxides

11 TOXICOLOGICAL INFORMATION

Acute toxicity

LC50 Oral – mouse – 595 mg/kg

Skin corrosion/irritation

no data available

Serious eye damage/eye irritation

no data available

Respiratory or skin sensitization

no data available

Germ cell mutagenicity

no data available

Carcinogenicity

no data available

Reproductive toxicity

no data available

Specific target organ toxicity - single exposure

no data available

Specific target organ toxicity - repeated exposure

no data available

Aspiration hazard

no data available

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

Date Issued: 8/14/2019

Potential health effects

Ingestion

Harmful if swallowed.

Inhalation

Harmful if inhaled. Causes respiratory tract irritation

Skin

Causes skin irritation.

Eyes

Causes eye irritation..

Additional Information

RTECS: Not available

Full Data on the toxicity of this product are not available. Hazardous properties cannot be excluded.

12 ECOLOGICAL INFORMATION

Environmental hazards

Avoid washing into water courses. Avoid contaminating public drains or water supply.

13 DISPOSAL CONSIDERATIONS

Disposal method

Contact specialist disposal companies.
Dispose of in accordance with Local Authority requirements. Recover and reclaim or recycle, if practical.

14 TRANSPORT INFORMATION

UN number: UN 3089

UN proper shipping name

ADR/RID:

METAL POWDER, FLAMMABLE, N.O.S.
(TANTALUM)

IMDG:

METAL POWDER, FLAMMABLE, N.O.S.
(TANTALUM)

IATA:

Metal powder, flammable, n.o.s. (tantalum)

Material Safety Data Sheet

Tantalum powder

Revision Date: 8/14/2019

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Transport hazard class(es)

ADR/RID: 4.1

IMDG: 4.1

IATA: 4.1

Packaging group

ADR/RID: II

IMDG: II

IATA: II

Environmental hazards

ADR/RID: no

IMDG Marine pollutant: no

IATA: no

Special precautions for user

no data available.

15 REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

Chemical Safety Assessment

no data available

Country specific information:

Germany

WGK3 (self classification)

Material Safety Data Sheet

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Revision Date: 8/14/2019

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16 OTHER INFORMATION

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