



CHEMICAL PRODUCT SAFETY DATA SHEET

Prepared in accordance with GB/T 16483 and GB/T 17519.

MATERION

Product name: Titanium Tungsten Product

Issue date: 05-14-2019

Version #: 01

SDS No: 347

SECTION 1 Chemical product and company identification

Chinese name of chemical	钛钨产品	
English name of chemical	Titanium Tungsten Product	
Manufacturer/Supplier	Materion Advanced Materials Group	
Address	42 Mt. Ebo Road South Brewster, NY 10509 United States	
Contact person	Not available.	
Telephone	1+845.279.0900	
e-mail	Not available.	
Emergency telephone number	Chemtrec	1+703.527.3887
Issue date	05-14-2019	
SDS No	347	

SECTION 2 Hazards identification

Emergency overview	Not available.	
Hazard categories	Not classified.	
Label elements		
Pictograms	None.	
Signal word	None.	
Hazard statement	None.	
Precautionary statement		
Prevention	None.	
Response	None.	
Storage	None.	
Disposal	None.	
Physical and chemical hazards	Not available.	
Health hazards	Not available.	
Environmental hazards	Not available.	
Supplemental information	None.	

SECTION 3 Composition/information on ingredients

Substance/mixture	Mixture	
Chemical name	Concentration (%)	CAS Number
Titanium	60 - 99	7440-32-6
Tungsten	1 - 40	7440-33-7

SECTION 4 First aid measures

Inhalation	Not available.
Skin contact	Not available.

Eye contact	Not available.
Ingestion	Not available.
Most important symptoms and health effects	Not available.
Personal protection for first-aid responders	Not available.

SECTION 5 Fire-fighting measures

Extinguishing media	Not available.
Extinguishing media to avoid	Use class D extinguishing agents, dry sand or sodium chloride on fire.
Specific hazards	None.
Special fire fighting procedures	None.
Protection of fire-fighters	None.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel	Not available.
For emergency responders	Not available.
Environmental precautions	Not available.
Clean-up methods and materials and containment measures	Not available.
Prevention of secondary hazards	Not available.

SECTION 7 Handling and storage

Handling	Not available.
Storage	Not available.

SECTION 8 Exposure controls/personal protection

Exposure limits

China OELs. Occupational Exposure Limits for Hazardous Agents in the Workplace, Chemical Hazardous Agents (GBZ 2.1-2007)

Components	Type	Value
Tungsten (CAS 7440-33-7)	PC-STEL	10 mg/m ³
	PC-TWA	5 mg/m ³

Biological limit values	No biological exposure limits noted for the ingredient(s).
Monitoring methods	Not available.
Engineering measures	Not available.
Personal protective equipment	
Respiratory protection	Not available.
Hand protection	Not available.
Eye protection	Not available.
Skin and body protection	Not available.

SECTION 9 Physical and chemical properties

Appearance

Physical state	Solid.
Form	Not available.
Color	Not available.
Odor	Not available.
pH	Not available.

Melting point/freezing point	3034.4 °F (1668 °C) estimated
Boiling point, initial boiling point, and boiling range	5948.6 °F (3287 °C) estimated
Flash point	Not available.
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.00001 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Density	14.61 g/cm ³ estimated
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	482 °F (250 °C) estimated
Decomposition temperature	Not available.
Other data	
Specific gravity	14.62 estimated

SECTION 10 Stability and reactivity

Stability	Not available.
Possibility of hazardous reactions	Not available.
Conditions to avoid	None.
Incompatible materials	None.
Hazardous decomposition products	None.

SECTION 11 Toxicological information

Acute toxicity	Not available.
Routes of exposure	Not available.
Skin corrosion/irritation	Not available.
Serious eye damage/eye irritation	Not available.
Respiratory or skin sensitization	
Respiratory sensitization	Not available.
Skin sensitizer	Not available.
Germ cell mutagenicity	Not available.
Carcinogenicity	Not available.
Toxic to reproduction	Not available.
Specific target organ toxicity following single exposure	Not available.
Specific target organ toxicity following repeated exposure	Not available.
Aspiration hazard	Not available.
Chronic effects	Not available.

SECTION 12 Ecological information

Ecotoxicity	Not available.
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Persistence and degradability	Not available.
Bioaccumulation	Not available.
Mobility in soil	Not available.
Other hazardous effects	Not available.

SECTION 13 Disposal considerations

Residual waste	Not available.
Contaminated packaging	Not available.
Local disposal regulations	Not available.

SECTION 14 Transport information

CNDG

Not regulated as dangerous goods.

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.

SECTION 15 Regulatory information

Law of the People's Republic of China on Prevention and Control of Occupational Diseases

Classification of occupational disease hazards

Tungsten (CAS 7440-33-7)

Regulations on the Control over Safety of Dangerous Chemicals

Catalog of Hazardous Chemicals

TITANIUM METAL POWDER [CONTAINING WATER NOT LESS THAN 25%, PARTICLE SIZE IS LESS THAN 53 MICRONS IF PRODUCED BY MECHANICALLY; PARTICLE SIZE IS LESS THAN 840 MICRONS IF PRODUCED BY CHEMICAL METHODS] (CAS 7440-32-6)

Provision on the Environmental Administration of New Chemical Substances

China Inventory of Existing Chemical Substances

Country(s) or region	Inventory name	On inventory (yes/no)*
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)
A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Montreal Protocol

Not applicable.

Kyoto protocol

Not applicable.

Basel Convention

Not applicable.

SECTION 16 Other information

References Not available.

Revision information

Product and Company Identification: Product Review
Composition / Information on Ingredients: Ingredients
Transport Information: Material Transportation Information