

Safety Data Sheet

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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878 Issue date: 13/03/2024 Revision date: 21/03/2024 Supersedes version of: 13/03/2024 Version: 1.1

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

1.1. Product identifier	
Product form	: Substance
Substance name	: Tungsten Chips 12-20 Mesh
Chemical name	: Tungsten
EC-No.	: 231-143-9
CAS-No.	: 7440-33-7
Product code	: B1500, B1506
Product group	: End product
Other means of identification	: Tungsten
1.2. Relevant identified uses of the	e substance or mixture and uses advised against
1.2.1. Relevant identified uses	
Main use category	: Professional use
Use of the substance/mixture	: Laboratory chemicals
Function or use category	: Laboratory chemicals
1.2.2. Uses advised against	
No additional information available	
1.3. Details of the supplier of the s	safety data sheet
Elemental Microanalysis Ltd	
1 Hameldown Road	
Okehampton, Devon, EX20 1UB	
GB United Kingdom	
T +44 1837 54446	
enquiries@microanalysis.co.uk, https://ww	w.elementalmicroanalysis.com/
1.4. Emergency telephone numbe	r
Emergency number	: +44 (0) 7990 767375
SECTION 2: Hazards identif	ïcation
2.1. Classification of the substanc	e or mixture
Classification according to Regulation (
Not classified	
Adverse physicochemical, human healt	h and environmental effects
Harmful to aquatic life with long lasting effe	ects.
2.2. Label elemente	

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP] No labelling applicable

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Substance type

: Mono-constituent

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

*** DRAFT ***

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Tungsten Chips 12-20 Mesh	CAS-No.: 7440-33-7 EC-No.: 231-143-9	100	Not classified

3.2. Mixtures

Not applicable

4.1. Description of first aid measures			
First-aid measures after inhalation : Remove person to fresh air and keep comfortable for breathing.			
First-aid measures after skin contact	: Wash skin with plenty of water.		
First-aid measures after eye contact	: Rinse eyes with water as a precaution.		
First-aid measures after ingestion	: Call a poison center or a doctor if you feel unwell.		
4.2. Most important symptoms and	effects, both acute and delayed		
No additional information available			

Treat symptomatically.

SECTION 5: Firefighting measures				
5.1. Extinguishing media				
Suitable extinguishing media	: Water spray. Dry powder. Foam.			
5.2. Special hazards arising from the substance or mixture				
Hazardous decomposition products in case of fire	: Toxic fumes may be released.			
5.3. Advice for firefighters				
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.			

SECTION 6: Accidental rele	ease measures				
6.1. Personal precautions, protective equipment and emergency procedures					
6.1.1. For non-emergency personnel					
Emergency procedures	: Ventilate spillage area.				
6.1.2. For emergency responders					
Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".				
6.2. Environmental precautions					
Avoid release to the environment.					
6.3. Methods and material for co	ntainment and cleaning up				
Methods for cleaning up	: Mechanically recover the product.				
Other information	: Dispose of materials or solid residues at an authorized site.				

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

6.4. Reference to other sections

For further information refer to section 13.

7.1. Precautions for safe handling	N
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Precautions for safe handling Hygiene measures	 Ensure good ventilation of the work station. Wear personal protective equipment. Do not eat, drink or smoke when using this product. Always wash hands after handling the product.
7.2. Conditions for safe storage,	including any incompatibilities
Storage conditions	: Store in a well-ventilated place. Keep cool.

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.1.1 National occupational exposure and biological limit values

Tungsten Chips 12-20 Mesh (7440-33-7)		
United Kingdom - Occupational Exposure Limits		
Local name	Tungsten	
WEL TWA (OEL TWA)	1 mg/m ³ and compounds (as W), soluble compounds 5 mg/m ³ and compounds (as W), insoluble compounds and others	
WEL STEL (OEL STEL)	3 mg/m ³ and compounds (as W), soluble compounds 10 mg/m ³ and compounds (as W), insoluble compounds and others	
Regulatory reference	EH40/2005 (Fourth edition, 2020). HSE	

8.1.2. Recommended monitoring procedures

No additional information available

8.1.3. Air contaminants formed

No additional information available

8.1.4. DNEL and PNEC

No additional information available

8.1.5. Control banding

No additional information available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

Appropriate engineering controls:

Ensure good ventilation of the work station.

8.2.2. Personal protection equipment

Personal protective equipment symbol(s):



*** DRAFT ***

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

8.2.2.1. Eye and face protection

Eye protection:

Safety glasses

8.2.2.2. Skin protection

Skin and body protection: Wear suitable protective clothing

Hand protection:

Protective gloves

8.2.2.3. Respiratory protection

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment

8.2.2.4. Thermal hazards

No additional information available

8.2.3. Environmental exposure controls

Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Colour	: Not available
Molecular mass	: 183.85 g/mol Source: HSDB
Odour	: Not available
Odour threshold	: Not available
Melting point	: 3410 °C Source: HSDB
Freezing point	: Not applicable
Boiling point	: 5900 °C Source: ICSC
Flammability	: Non flammable.
Explosive limits	: Not applicable
Lower explosion limit	: Not applicable
Upper explosion limit	: Not applicable
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: Not available
pH	: Not available
pH solution	: Not available
Viscosity, kinematic	: Not applicable
Solubility	: Not available
Partition coefficient n-octanol/water (Log Kow)	: Not available
Vapour pressure	: 0.000000197 mm Hg at 25°C Source: HSDB
Vapour pressure at 50°C	: Not available
Density	: Not available
Relative density	: 18.7 – 19.3 Source: HSDB
Relative vapour density at 20°C	: Not applicable
Particle size	: Not available

9.2. Other information

9.2.1. Information with regard to physical hazard classes

No additional information available

9.2.2. Other safety characteristics

No additional information available

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological informa	tion
11.1. Information on hazard classes as def	ined in Regulation (EC) No 1272/2008
Acute toxicity (oral) Acute toxicity (dermal) Acute toxicity (inhalation)	 Not classified Not classified Not classified
Tungsten Chips 12-20 Mesh (7440-33-7)	
LD50 oral rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 401 (Acute Oral Toxicity)
LD50 dermal rat	> 2000 mg/kg bodyweight Animal: rat, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)
LC50 Inhalation - Rat	> 5.4 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity)
LC50 Inhalation - Rat (Dust/Mist)	> 5.4 mg/l Source: ECHA
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Tungsten Chips 12-20 Mesh (7440-33-7)	
NOAEL (animal/male, F1)	≈ 160 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 443 (Extended One-Generation Reproductive Toxicity Study)
STOT-single exposure	: Not classified
STOT-repeated exposure	: Not classified
Tungsten Chips 12-20 Mesh (7440-33-7)	
NOAEC (inhalation, rat, dust/mist/fume, 90 days)	> 0.652 mg/l air Animal: rat, Guideline: OECD Guideline 412 (Subacute Inhalation Toxicity: 28-Day Study)

	Aspiration hazard :	Not classified
Tungsten Chips 12-20 Mesh (7440-33-7)		
	Viscosity, kinematic	Not applicable

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

*** DRAFT ***

11.2. Information on other hazards

No additional information available

SECTION 12: Ecological information	วท
12.1. Toxicity	
Ecology - general Hazardous to the aquatic environment, short-term acute) Hazardous to the aquatic environment, long-term chronic) Not rapidly degradable	 Harmful to aquatic life with long lasting effects. Not classified Not classified (Conclusive but not sufficient for classification).
Tungsten Chips 12-20 Mesh (7440-33-7)	
LC50 - Fish [1]	> 181 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio)
EC50 - Crustacea [1]	> 163 mg/l Test organisms (species): Daphnia magna
EC50 72h - Algae [1]	> 17.7 mg/l Source: ECHA
NOEC chronic fish	≥ 9.8 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '38 d'
12.2. Persistence and degradability	
No additional information available	
12.3. Bioaccumulative potential	
No additional information available	
12.4. Mobility in soil	
No additional information available	
12.5. Results of PBT and vPvB assessme	ent
No additional information available	
12.6. Endocrine disrupting properties	
No additional information available	
12.7. Other adverse effects	
No additional information available	
SECTION 13: Disposal considerati	ions
13.1. Waste treatment methods	
Naste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions

SECTION 14: Transport information In accordance with ADR / IMDG / IATA / ADN / RID ADR IMDG ΙΑΤΑ ADN RID 14.1. UN number or ID number Not regulated Not regulated Not regulated Not regulated Not regulated 14.2. UN proper shipping name Not regulated Not regulated Not regulated Not regulated Not regulated

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

ADR	IMDG	ΙΑΤΑ	ADN	RID	
14.3. Transport hazard class(es)					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.4. Packing group					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
14.5. Environmental hazards					
Not regulated	Not regulated	Not regulated	Not regulated	Not regulated	
No supplementary information available					

14.6. Special precautions for user

Overland transport

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

Inland waterway transport

Not regulated

Rail transport

Not regulated

14.7. Maritime transport in bulk according to IMO instruments

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations

REACH Annex XVII (Restriction List)

Not listed on REACH Annex XVII

REACH Annex XIV (Authorisation List)

Not listed on REACH Annex XIV (Authorisation List)

REACH Candidate List (SVHC)

Not listed on the REACH Candidate List

PIC Regulation (Prior Informed Consent)

Not listed on the PIC list (Regulation EU 649/2012)

POP Regulation (Persistent Organic Pollutants)

Not listed on the POP list (Regulation EU 2019/1021)

Ozone Regulation (1005/2009)

Not listed on the Ozone Depletion list (Regulation EU 1005/2009)

Explosives Precursors Regulation (2019/1148)

Contains no substance(s) listed on the Explosives Precursors list (Regulation EU 2019/1148 on the marketing and use of explosives precursors)

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Drug Precursors Regulation (273/2004)

Contains no substance(s) listed on the Drug Precursors list (Regulation EC 273/2004 on the manufacture and the placing on market of certain substances used in the illicit manufacture of narcotic drugs and psychotropic substances)

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:		
ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways	
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road	
ATE	Acute Toxicity Estimate	
BCF	Bioconcentration factor	
BLV	Biological limit value	
BOD	Biochemical oxygen demand (BOD)	
COD	Chemical oxygen demand (COD)	
DMEL	Derived Minimal Effect level	
DNEL	Derived-No Effect Level	
EC-No.	European Community number	
EC50	Median effective concentration	
EN	European Standard	
IARC	International Agency for Research on Cancer	
ΙΑΤΑ	International Air Transport Association	
IMDG	International Maritime Dangerous Goods	
LC50	Median lethal concentration	
LD50	Median lethal dose	
LOAEL	Lowest Observed Adverse Effect Level	
NOAEC	No-Observed Adverse Effect Concentration	
NOAEL	No-Observed Adverse Effect Level	
NOEC	No-Observed Effect Concentration	
OECD	Organisation for Economic Co-operation and Development	
OEL	Occupational Exposure Limit	
РВТ	Persistent Bioaccumulative Toxic	
PNEC	Predicted No-Effect Concentration	
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail	
SDS	Safety Data Sheet	
STP	Sewage treatment plant	
ThOD	Theoretical oxygen demand (ThOD)	
TLM	Median Tolerance Limit	
VOC	Volatile Organic Compounds	

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2020/878

Abbreviations and acronyms:	
CAS-No.	Chemical Abstract Service number
N.O.S.	Not Otherwise Specified
vPvB	Very Persistent and Very Bioaccumulative
ED	Endocrine disruptor

Safety Data Sheet (SDS)_EMAL, EU

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.