

EC Safety Data Sheet

According to Regulation (EC) no 1907/2006, Article 31

Trade name: Tungsten electrode E3[®]

Last revised: 30/05/2016

Print date: 31/05/2017



1. Identification of the substance or mixture and of the company/undertaking

1.1 Product identifier

Trade name: **Tungsten electrode E3[®]**

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Unknown

Use of the substance/mixture:

Non-fusing electrode in the TIG welding process; Electrode for lighting technology; electrode for plasma melting, plasma cutting, plasma spraying (thermal spraying); emission cathode for electronic tubes

1.3 Details of the supplier of the safety data sheet

Manufacturer/supplier:

Alexander Binzel Schweißtechnik GmbH & Co. KG
Postfach 10 01 53 / D-35331 Gießen, Germany

Telephone:

+49 (0)6408/59-0

Contact for information:

Technical documentation

Telephone:

+49 (0)6408/59-0

e-mail:

technischdokumentation@binzel-abicor.com

1.4 Emergency telephone number:

Giftinformationszentrum der Länder Rheinland-Pfalz und Hessen
(Poisons centre for the states of Rhineland-Palatinate and Hesse)
Langenbeckstraße 1; Building 601; 55131 Mainz
Tel.: +49 (0)6131 / 19 24 0

University Medical Center of the Johannes Gutenberg University, Mainz

2. Hazards identification

2.1 Classification of the substance or mixture

Classification according to

Regulation (EC) No. 1272/2008:

The product has not been classified in accordance with the CLP Regulation.

Special indications of danger to humans and the environment:

The product is not subject to labelling according to the calculation method established in the latest version of the "General Classification Guideline for Preparations of the EC".

Classification system:

The classification is in line with the current EC lists but with supplementary information from technical literature as well as information provided by companies.

2.2 Label elements

Marking according to the

Regulation (EC) No 1272/2008:

N/a

Hazard pictograms:

N/a

Signal word:

N/a

Precautionary statements:

N/a

2.3 Other hazards

Results of PBT and vPvB assessment

PBT:

Not applicable

vPvB:

Not applicable

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3. Composition/information on ingredients

Chemical characterisation
Description: Mixture of the substances listed below with non-dangerous admixtures.

Chemical characterisation: Mixtures
Description: Alloy in compact form

The classifications listed below are classifications of the pure substance and are provided for information purposes only. Alloys are special preparations according to Regulation (EC) no. 1907/2006 (REACH Regulation). The classification of a pure substance does not apply to its use as part of an alloy.

Dangerous ingredients: Not applicable
Additional information: See section 16 for the wording of the hazard statements listed.

4. First aid measures

4.1 Description of first aid measures

General information: No special measures required.
After inhalation: If symptoms occur, seek medical treatment.
After skin contact: If symptoms occur, seek medical treatment.
After eye contact: If symptoms occur, seek medical treatment.
After swallowing: If symptoms occur, seek medical treatment.

4.2 Most important symptoms and effects, both acute and delayed: No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

5. Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media: CO₂, sand, extinguishing powder or water spray jet. Fight larger fires with water spray jet or foam.

5.2 Special hazards arising from the substance or mixture: No further relevant information available.

5.3 Advice for firefighters

Special protective equipment: Do not inhale explosive and combustible gases.

6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures: Not required.

6.2 Environmental precautions: No special measures required.

6.3 Methods and material for containment and cleaning up: Pick up mechanically.

6.4 Reference to other sections: See section 7 for information on safe handling.
See section 8 for information on personal protection equipment.
See section 13 for disposal information.

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7. Handling and storage

7.1 Precautions for safe handling: No special measures required.
Information on fire and explosion protection: No special measures required.

7.2 Conditions for safe storage, taking account of incompatibilities

Storage:

Requirements to be met by storage rooms and vessels:

No specific requirements

Information about storage in a common storage facility:

Not required.

Further information about storage conditions:

None

7.3 Specific end use(s):

No further relevant information available.

8. Exposure controls/personal protective equipment

Additional information about the design of technical facilities:

No further information; see item 7.

8.1 Control parameters

Components with limit values that require monitoring at the workplace:

7440-33-7 tungsten

MAC (Germany)

See section IIb

Additional information:

Based on the lists valid at the time of creation.

8.2 Exposure controls

Personal protective equipment:

General protective and hygiene measures:

The standard precautions for dealing with chemicals must be observed.

Respiratory protection:

Not required.

Hand protection:

Not required.

Glove material:

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Breakthrough time of the glove material:

N/a

Gloves made from the materials

below offer suitable splatter protection:

N/a

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9. Physical and chemical properties

9.1 Information on basic physical and chemical properties

General information	
Form	Solid
Colour	Metallic grey
Odour	Odourless
Odour threshold	Not determined
pH	Not applicable
Change of state	
Melting point/melting range	3420°C
Boiling point/boiling range	Not determined
Flash point	Not applicable
Flammability (solid, gas)	Not determined
Ignition temperature	
Decomposition temperature	Not determined
Auto-ignition	The product is not auto-igniting.
Danger of explosion	The product does not pose a danger of explosion.
Vapour pressure at 20°C (mm Hg)	Not applicable
Density at 20°C	18.6 g/cm ³
Relative density	18.6 g/cm ³
Vapour density	Not applicable
Evaporation rate	Not applicable
Solubility in/miscibility with water	Insoluble
Partition coefficient (n-octanol/water):	Not determined
Viscosity	
- Dynamic	Not applicable
- Kinematic	Not applicable
Other information	No further relevant information available.

10. Stability and reactivity

- 10.1 Reactivity:** No further relevant information available.
- 10.2 Chemical stability**
Thermal decomposition/
conditions to avoid: No decomposition if used according to specifications.
- 10.3 Possibility of hazardous**
reactions: No decomposition if used according to specifications.
- 10.4 Conditions to avoid:** No further relevant information available.
- 10.5 Incompatible materials:** No further relevant information available.
- 10.6 Hazardous decomposition**
products: No hazardous decomposition products known.

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11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity: Based on the data available, the classification criteria are not fulfilled.

Primary irritation:

Skin corrosion/irritation: Based on the data available, the classification criteria are not fulfilled.

Serious eye damage/irritation: Based on the data available, the classification criteria are not fulfilled.

Respiratory or skin sensitisation: Based on the data available, the classification criteria are not fulfilled.

CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

Germ cell mutagenicity: Based on the data available, the classification criteria are not fulfilled.

Carcinogenicity: Based on the data available, the classification criteria are not fulfilled.

Reproductive toxicity: Based on the data available, the classification criteria are not fulfilled.

Specific target organ toxicity (STOT) through single exposure: Based on the data available, the classification criteria are not fulfilled.

Specific target organ toxicity (STOT) through repeated exposure: Based on the data available, the classification criteria are not fulfilled.

Aspiration hazard: Based on the data available, the classification criteria are not fulfilled.

12. Ecological information

12.1 Toxicity

Aquatic toxicity: No further relevant information available.

12.2 Persistence and degradability: No further relevant information available.

12.3 Bioaccumulative potential: No further relevant information available.

12.4 Mobility in soil: No further relevant information available.

Additional ecological information

General information: Do not allow to enter ground water, water bodies or the sewage system.

12.5 Results of PBT and vPvB assessment

PBT: Not applicable

vPvB: Not applicable

12.6 Other harmful effects: No further relevant information available.

13. Disposal considerations

13.1 Waste treatment methods

Recommendation: Small quantities can be disposed of in household waste.

Waste code: See EWC 12 01 03 – Non-ferrous metal filings and turnings

Recommendation: Disposal in accordance with official regulations.

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14. Transport information

14.1 UN number	
ADR, ADN, IMDG, IATA	N/a
14.2 UN proper shipping name	
ADR, ADN, IMDG, IATA	N/a
14.3 Transport hazard classes	
ADR, ADN, IMDG, IATA	
Class	N/a
14.4 Packing group	
ADR, IMDG, IATA	N/a
14.5 Environmental hazards	
	Not applicable
14.6 Special precautions for user	
UN 'Model regulation'	N/a

15. Regulatory information

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

Directive 2012/18/EU

Named hazardous substances - ANNEX I

National regulations

Technical instructions (air):

Class	Percentage
II	2.5 – 10

Water hazard class: Not hazardous to water (classification by the German "Commission for the Evaluation of Substances Hazardous to Waters" (KBwS))

15.2 Chemical safety assessment: No chemical safety assessment has been performed.

16. Other information

Revisions to the previous versions are marked with "*" in the left margin.

Abbreviations and acronyms: ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road).
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail).
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
VOC: Volatile Organic Compounds (USA, EU)
Acute Tox. 2: Acute toxicity, Hazard Category 2
Skin Sens. 1: Sensitisation - Skin, Hazard Category 1
Carc. 2: Carcinogenicity, Hazard Category 2
STOT RE 1: Specific target organ toxicity - Repeated exposure, Hazard Category 1

This information is based on our present knowledge and does not assure properties in the legal sense. The user is responsible for observing legal requirements. The company cannot be held responsible for any damage caused during the handling of or contact with the above product.