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

Trade name: Tungsten electrode WP, WR2, WLa10, WLa15, WLa20, WCe 20, WZr3, WZr8





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

1.1 Product identifier

Tungsten electrode WP, WR2, WLa10, WLa15, WLa20, Trade name:

WCe 20. WZr3. WZr8

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

+49 (0)6408/59-0 Telephone:

Contact for information: **Technical documentation**

Telephone: +49 (0)6408/59-0

e-mail: technischedokumentation@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

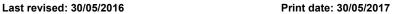
Results of PBT and vPvB assessment

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:

After skin contact:

After eye contact:

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

Not required.

storage facility: 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:

Gloves made from the materials

below offer suitable splatter protection:

N/a

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9. Physical and chemical properties

Last revised: 30/05/2016

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	WP 19,2 g/cm ³			
	WR2 18,6 g/cm ³			
	WLa 10 18,84 g/cm ³			
	WLa 15 18,66 g/cm ³			
	WLa 20 18,49 g/cm ³			
	WCe 20 18,53 g/cm ³			
	WZr 3 19,06 g/cm ³			
	WZr 8 18,83 g/cm ³			
Relative density	WP 19,2 g/cm ³			
	WR2 18,6 g/cm ³			
	WLa 10 18,84 g/cm ³			
	WLa 15 18,66 g/cm ³			
	WLa 20 18,49 g/cm ³			
	WCe 20 18,53 g/cm ³			
	WZr 3 19,06 g/cm ³			
	WZr 8 18,83 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	Information No further relevant information available.			

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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.

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

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.

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

CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction)

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

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.

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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.

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	Not applicable		
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	
Ш		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.

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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.