Product information

based on Regulation (EC) no. 1907/2006, Article 31

Printing date 21.04.2023 Version number 3 (replaces version 2) Revision: 21.04.2023

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

- **1.1 Product identifier**
- **Trade name:** **Gouging carbon electrode AL**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against** Identified use: intended for professional use only!
- **Product category** Article according to Article 3 No. 3 of the REACH Regulation.
  The classifications listed below are classifications of the pure substance and are provided for information purposes only.
- **Application of the substance / the mixture** Gouging
- **Manufacturer/Supplier:** Alexander BINZEL
  Schweisstechnik GmbH & Co.KG
  Postfach 10 01 53 / D-35331 Giessen
  Tel.: +49 (0) 6408 / 59-0
  Fax: +49 (0) 6408 / 59-191
  Mail: technischedokumentation@binzel-abicor.com
- **Further information obtainable from:** Technical Documentation
- **1.4 Emergency telephone number:** Registration with a poison control center is not required for articles. In the event of an accident, contact the national emergency call center.

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008** Article according to Article 3 No. 3 of the REACH Regulation.
  The classifications listed below are classifications of the pure substance and are provided for information purposes only.

The product is not classified, according to the CLP regulation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** Void
- **Hazard pictograms** Void
- **Signal word** Void
- **Hazard statements** Void
- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Mixtures**
- **Description:** Article according to REACH regulation article 3 n°3.
  The classifications listed below are classifications of the pure substance and are provided for information purposes only.

- **Dangerous components:**

CAS: 7782-42-5 EINECS: 231-955-3	Graphite	substance with a Community workplace exposure limit	≥50-≤100%
CAS: 7429-90-5 EINECS: 231-072-3	aluminium powder (pyrophoric)	Flam. Sol. 1, H228	≥10-≤50%
CAS: 1333-86-4 EINECS: 215-609-9	Carbon black	substance with a Community workplace exposure limit	≥0.5-≤10%

- **Additional information:** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **General information:** No special measures required.
  Do not leave affected persons unattended.
  Personal protection for the First Aider.
  Take affected persons out of danger area and lay down.
- **After inhalation:** In case of unconsciousness place patient stably in side position for transportation.
  Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
  Seek medical treatment in case of complaints.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
  Protect unharmed eye.

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- **After swallowing:** If symptoms persist consult doctor.
- **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.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Sand
  CO_2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
  Use fire extinguishing methods suitable to surrounding conditions.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** Formation of toxic gases is possible during heating or in case of fire.
  Nitrogen oxides (NOx)
  Carbon monoxide (CO)
- **5.3 Advice for firefighters**
- **Protective equipment:** Do not inhale explosion gases or combustion gases.
- **Additional information** Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** No special measures required.
  Do not allow to enter sewers/ surface or ground water.
- **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.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** No special measures required.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Store only in the original receptacle.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** Store in dry conditions.
- **Storage class:** 13
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**

Ingredients with limit values that require monitoring at the workplace:	
7782-42-5 Graphite	
OEL (Ireland)	Long-term value: 2 mg/m³ respirable fraction
7429-90-5 aluminium powder (pyrophoric)	
OEL (Ireland)	Long-term value: 1* mg/m³ *metal, respirable fraction
1333-86-4 Carbon black	
OEL (Ireland)	Long-term value: 3* mg/m³ *inhalable fraction

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- **Regulatory information** OEL (Ireland): 2021 CoP for the Safety, Health and Welfare at Work
- **Additional information:** The lists valid during the making were used as basis.
- **8.2 Exposure controls**
- **Appropriate engineering controls** No further data; see item 7.
- **Individual protection measures, such as personal protective equipment**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Hand protection** Leather gloves
- **Material of gloves** 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.
- **Penetration time of glove material** The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

SECTION 9: Physical and chemical properties

- **9.1 Information on basic physical and chemical properties**	
- **General Information**	
- **Physical state**	Solid
- **Colour:**	Black
- **Odour:**	Odourless
- **Odour threshold:**	Not determined.
- **Melting point/freezing point:**	C: 3527 °C AL: 660 °C Undetermined.
- **Boiling point or initial boiling point and boiling range**	C: 4027 °C AL: 2519 °C Undetermined.
- **Flammability**	Not applicable.
- **Lower and upper explosion limit**	
- **Lower:**	Not determined.
- **Upper:**	Not determined.
- **Flash point:**	Not applicable.
- **Decomposition temperature:**	Not determined.
- **pH**	Not applicable.
- **Viscosity:**	
- **Kinematic viscosity**	Not applicable.
- **Dynamic:**	Not applicable.
- **Solubility**	
- **water:**	Not miscible or difficult to mix.
- **Partition coefficient n-octanol/water (log value)**	Not determined.
- **Density and/or relative density**	
- **Density:**	C: 1.7 g/cm² AL: 2.7 g/cm² Not determined.
- **Relative density**	Not determined.
- **Vapour density**	Not determined.
- **Particle characteristics**	See item 3.
- **9.2 Other information**	
- **Appearance:**	
- **Form:**	Solid
- **Important information on protection of health and environment, and on safety.**	
- **Auto-ignition temperature:**	Product is not selfigniting.
- **Explosive properties:**	Product does not present an explosion hazard.
- **Change in condition**	
- **Evaporation rate**	Not determined.
- **Information with regard to physical hazard classes**	
- **Explosives**	Void
- **Flammable gases**	Void
- **Aerosols**	Void
- **Oxidising gases**	Void
- **Gases under pressure**	Void
- **Flammable liquids**	Void
- **Flammable solids**	Void
- **Self-reactive substances and mixtures**	Void

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- **Pyrophoric liquids**	Void
- **Pyrophoric solids**	Void
- **Self-heating substances and mixtures**	Void
- **Substances and mixtures, which emit flammable gases in contact with water**	Void
- **Oxidising liquids**	Void
- **Oxidising solids**	Void
- **Organic peroxides**	Void
- **Corrosive to metals**	Void
- **Desensitised explosives**	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity**	No further relevant information available.
- **10.2 Chemical stability**	
- **Thermal decomposition / conditions to be avoided:**	No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**	No dangerous reactions known.
- **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 dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

- **LD/LC50 values relevant for classification:**

Oral	LD50	>5,000 mg/kg (rat)
Dermal	LD50	>2,000 mg/kg (rabbit)

7429-90-5 aluminium powder (pyrophoric)

Oral	LD50	15,900 mg/kg (rat)
Inhalative	LC50	0.888 mg/l (rat) (4h)
	NOAEC	10 mg/m³ (rat)

1333-86-4 Carbon black

Oral	LD50	10,000 mg/kg (rat)

- **Skin corrosion/irritation**	Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation**	Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation**	Based on available data, the classification criteria are not met.
- **Germ cell mutagenicity**	Based on available data, the classification criteria are not met.
- **Carcinogenicity**	Based on available data, the classification criteria are not met.
- **Reproductive toxicity**	Based on available data, the classification criteria are not met.
- **STOT-single exposure**	Based on available data, the classification criteria are not met.
- **STOT-repeated exposure**	Based on available data, the classification criteria are not met.
- **Aspiration hazard**	Based on available data, the classification criteria are not met.

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:**

LC50/96 h	>100 mg/l (Pimephales promelas)
EC50	>10,000 mg/l (Daphnia magna)

- **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.
- **12.5 Results of PBT and vPvB assessment**	
- **PBT:**	Not applicable.
- **vPvB:**	Not applicable.

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- **12.6 Endocrine disrupting properties** The product does not contain substances with endocrine disrupting properties.
- **12.7 Other adverse effects**
- **Additional ecological information:**
- **General notes:** Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

SECTION 13: Disposal considerations

- **13.1 Waste treatment methods**
- **Recommendation** Disposal according to official regulations

- **European waste catalogue**	
17 04 09*	metal waste contaminated with hazardous substances

- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

- **14.1 UN number or ID number**	
- **ADR, ADN, IMDG, IATA**	Void
- **14.2 UN proper shipping name**	
- **ADR, ADN, IMDG, IATA**	Void
- **14.3 Transport hazard class(es)**	
- **ADR, ADN, IMDG, IATA**	
- **Class**	Void
- **14.4 Packing group**	
- **ADR, IMDG, IATA**	Void
- **14.5 Environmental hazards:**	
- **Marine pollutant:**	No
- **14.6 Special precautions for user**	Not applicable.
- **14.7 Maritime transport in bulk according to IMO instruments**	Not applicable.
- **UN "Model Regulation":**	Void

SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **REGULATION (EU) 2019/1148**

- **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

- **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

- **Regulation (EC) No 273/2004 on drug precursors**

None of the ingredients is listed.

- **Regulation (EC) No 111/2005 laying down rules for the monitoring of trade between the Community and third countries in drug precursors**

None of the ingredients is listed.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

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SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.
The safety data sheet issued is also compliant with the regulation Annex I of Regulation (EU) no. 453/2010 and Annex II of Regulation (EU) no. 2020/878.

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- **Relevant phrases** H228 Flammable solid.
- **Department issuing SDS:** Technical Documentation
- **Date of previous version:** 22.03.2023
- **Version number of previous version:** 2
- **Abbreviations and acronyms:**
ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)
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)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Sol. 1: Flammable solids – Category 1
- **Sources**
- www.echa.europa.eu
- www.baua.de
IFA: Institute für Occupational Safety and Health of the German Social Accident Insurance:
- www.dguv.de/ifa/gestis/gestis-stoffdatenbank/index.jsp
- www.dguv.de/ifa/gestis/gestis-dnel-liste
- *** Data compared to the previous version altered.**