

Printing date 28.09.2018 Version number 2 Revision: 28.09.2018

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

· 1.1 Product identifier

• Trade name: Elektrolytische Entfettung spezial, cyanidhaltig, Ansatzsalz Electrolytic degreaser special, cyanidic (make-up salt)

· Article number: 3040400303, 3040400403

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

No further relevant information available.

· Application of the substance / the mixture Degreasing agent

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

Wieland Edelmetalle GmbH

Schwenninger Str. 13

75179 Pforzheim

Telefon +49 (07231)-1393-0, Telefax +49 (07231)-1393-100

· Further information obtainable from:

Wieland Edelmetalle GmbH

 $www.wiel and \hbox{-} edel metalle.de$

msds@wieland-edelmetalle.de

· 1.4 Emergency telephone number:

Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H301 Toxic if swallowed.

Acute Tox. 2 H310 Fatal in contact with skin.

Acute Tox. 3 H331 Toxic if inhaled.



GHS05 corrosion

Skin Corr. 1A H314 Causes severe skin burns and eye damage.

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







GHS05

GHS06

GHS09

· Signal word Danger

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· Hazard-determining components of labelling:

sodium hydroxide potassium cyanide

· Hazard statements

H301+H331 Toxic if swallowed or if inhaled.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P321 Specific treatment (see on this label).

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

water/shower.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if

present and easy to do. Continue rinsing.

P361+P364 Take off immediately all contaminated clothing and wash it before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

· Additional information:

EUH031 Contact with acids liberates toxic gas.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- PBT: Not applicable.vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

| · Dangerous components: | | |
|-------------------------|--|---------|
| | sodium hydroxide | 50-100% |
| EINECS: 215-185-5 | 📀 Skin Corr. 1A, H314; 🕠 Acute Tox. 4, H302 | |
| | sodium carbonate | 25-50% |
| EINECS: 207-838-8 | () Eye Irrit. 2, H319 | |
| CAS: 151-50-8 | potassium cyanide | 7-<10% |
| EINECS: 205-792-3 | Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330; Aquatic Acute 1, H400; Aquatic Chronic 1, H410 | |

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.
- · After inhalation:

Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.

Use a respiratory bag or breathing device.

· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- · After swallowing:

Rinse out mouth and then drink plenty of water.

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Do not induce vomiting; call for medical help immediately.

· 4.2 Most important symptoms and effects, both acute and delayed

Cramp

Dizziness

Nausea

Headache

- · Hazards Danger of gastric perforation.
- · 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: Use fire extinguishing methods suitable to surrounding conditions.
- · 5.2 Special hazards arising from the substance or mixture

In case of fire, the following can be released:

Hydrogen cyanide (HCN)

- · 5.3 Advice for firefighters
- · Protective equipment: Wear self-contained respiratory protective device.
- · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- \cdot 6.3 Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of dust.

- Information about fire and explosion protection: Keep respiratory protective device available.
- · 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: Do not store together with acids.
- · Further information about storage conditions:

Keep receptacle tightly sealed.

Store under lock and key and with access restricted to technical experts or their assistants only.

· Storage class: 6.1B

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· 7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters
- · Ingredients with limit values that require monitoring at the workplace:

1310-73-2 sodium hydroxide

WEL Short-term value: 2 mg/m³

151-50-8 potassium cyanide

WEL Long-term value: 5 mg/m³

as CN; Sk

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Avoid contact with the eyes and skin.

· Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

Short term filter device:

Filter P3

· Protection of hands:



Protective gloves

· Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Chloroprene rubber, CR

Camapren

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

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| SECTION 9: Physical and che | emical properties |
|---|---|
| 9.1 Information on basic physical an | d chemical properties |
| General Information | |
| Appearance: | |
| Form: | Solid |
| Colour: | Colourless |
| Odour: | Product specific |
| pH-value (55.0 g/l) at 20 $^{\circ}$ C: | >13 |
| Change in condition | |
| Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling rai | nge: Undetermined. |
| Flash point: | Not applicable. |
| Auto-ignition temperature: | Product is not selfigniting. |
| Explosive properties: | Product does not present an explosion hazard. |
| Explosion limits: | |
| Oxidising properties | None |
| Density: | |
| Bulk density at 20 °C: | ca. 900 kg/m³ |
| Solubility in / Miscibility with | |
| water: | Easily soluble. |
| Solvent content: | |
| Organic solvents: | 0.0 % |
| Solids content: | 100.0 % |
| 9.2 Other information | No further relevant information available. |

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 Contact with acids releases toxic gases.
- · 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: Hydrogen cyanide (prussic acid)

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Toxic if swallowed or if inhaled.

Fatal in contact with skin.

· LD/LC50 values relevant for classification:

| ATE (Acute Toxicity Estimates) | | | | |
|--------------------------------|----------|------------------|--|--|
| | | 54.5 mg/kg (rat) | | |
| Dermal | LD50 | 55.3 mg/kg | | |
| Inhalative | LC50/4 h | 0.55 mg/l | | |

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| 1310-73-2 | 1310-73-2 sodium hydroxide | | |
|------------|----------------------------|----------------------------|--|
| Oral | LD50 | 2,000 mg/kg (rat) | |
| 497-19-8 s | 497-19-8 sodium carbonate | | |
| Oral | LD50 | D50 4,000 mg/kg (rat) | |
| 151-50-8 p | 151-50-8 potassium cyanide | | |
| Oral | LD50 | 5 mg/kg (rat) | |
| | LDLO | 2.86 mg/kg (human) (RTECS) | |
| Dermal | LD50 | 5 mg/kg (ATE) | |
| Inhalative | LC50/4 h | 0.05 mg/l (ATE) | |

- · Primary irritant effect:
- Skin corrosion/irritation

Causes severe skin burns and eye damage.

· Serious eye damage/irritation

Causes serious eye damage.

- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · 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.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

151-50-8 potassium cyanide

LC50 0.45 mg/l (96h) (Lepomis macrochirus (bluegrill))

EC50 2 mg/l (48h) (Daphnia magna (water flea))

EC50 1.8-1.9 mg/l (72h) (Eutosiphon sulcatum) (CN)

IC50 0.03 mg/l (8d) (Sc.quadricauda)

- 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 notes:

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation Must be specially treated adhering to official regulations.

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- · Uncleaned packaging:
- · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning. Packagings that may not be cleansed are to be disposed of in the same manner as the product.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

| | ation |
|--|--|
| 14.1 UN-Number ADR, IMDG, IATA | UN2923 |
| 14.2 UN proper shipping name ADR | 2923 CORROSIVE SOLID, TOXIC, N.O.S. (SODIU HYDROXIDE, POTASSIUM CYANIDE |
| IMDG | ENVIRONMENTALLY HAZARDOUS CORROSIVE SOLID, TOXIC, N.O.S. (SODIU HYDROXIDE, POTASSIUM CYANIDE), MARIN POLLUTANT |
| IATA | CORROSIVE SOLID, TOXIC, N.O.S. (SODIU HYDROXIDE, POTASSIUM CYANIDE) |
| 14.3 Transport hazard class(es) | |
| ADR | |
| | |
| Class Label | 8 (CT2) Corrosive substances. 8 +6.1 |
| IMDG | |
| | |
| Class | 8 Corrosive substances. |
| Label | 8 +6.1 |
| IATA | |
| 8 | |
| Class | 8 Corrosive substances. |
| Class Label | 8 Corrosive substances. 8 +6.1 |
| | |
| Label 14.4 Packing group ADR, IMDG, IATA 14.5 Environmental hazards: | 8 +6.1 |
| Label 14.4 Packing group ADR, IMDG, IATA | 8 +6.1 II Yes |
| Label 14.4 Packing group ADR, IMDG, IATA 14.5 Environmental hazards: | 8 +6.1 II |

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|--|---|
| · EMS Number: | F-A,S-B |
| · Segregation groups | Cyanides |
| · 14.7 Transport in bulk according to A Marpol and the IBC Code | nnex II of Not applicable. |
| · Transport/Additional information: | |
| · ADR | |
| · Limited quantities (LQ) | 1 kg |
| · Excepted quantities (EQ) | Code: E2 |
| • • | Maximum net quantity per inner packaging: 30 g |
| | Maximum net quantity per outer packaging: 500 g |
| · Transport category | 2 |
| · Tunnel restriction code | E |
| · IMDG | |
| · Limited quantities (LQ) | 1 kg |
| · Excepted quantities (EQ) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 g |
| | Maximum net quantity per outer packaging: 500 g |
| · UN "Model Regulation": | UN2923, CORROSIVE SOLID, TOXIC, N.O. |
| | (SODIUM HYDROXIDE, POTASSIUM CYANIDE |
| | ENVIRONMENTALLY HAZARDOUS, 8 (6.1), II |

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.
- · Seveso category
- H2 ACUTE TOXIC
- E2 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 50 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 200 t
- · National regulations:
- · Waterhazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.
- · 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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.

· Relevant phrases

H300 Fatal if swallowed.

H302 Harmful if swallowed.

H310 Fatal in contact with skin.

H314 Causes severe skin burns and eye damage.

H319 Causes serious eye irritation.

H330 Fatal if inhaled.

H400 Very toxic to aquatic life.

H410 Very toxic to aquatic life with long lasting effects.

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Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)

ICAO: International Civil Aviation Organisation

ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)

ADR: Accord européen sur le transport 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

Acute Tox. 2: Acute toxicity – Category 2 Acute Tox. 3: Acute toxicity – Category 3

Acute Tox. 4: Acute toxicity - Category 4

Acute Tox. 1: Acute toxicity - Category 1

Skin Corr. 1A: Skin corrosion/irritation – Category 1A

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

* Data compared to the previous version altered.