

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 10.12.2014

Version number 1

Revision: 10.12.2014

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.wieland-edelmetalle.de
msds@wieland-edelmetalle.de
- **1.4 Emergency telephone number:**
GIZ-Nord, Göttingen, Germany
+49 551 19240
Member of EPECS Network

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.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



T+; Very toxic

R26/27/28: Very toxic by inhalation, in contact with skin and if swallowed.



C; Corrosive

R35: Causes severe burns.



N; Dangerous for the environment

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R51/53: Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

R31: Contact with acids liberates toxic gas.

· **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

· **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

· **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**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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

P303+P361+P353 IF ON SKIN (or hair): Remove/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.

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:**

CAS: 1310-73-2	sodium hydroxide	50-100%
EINECS: 215-185-5	C R35	
	Skin Corr. 1A, H314	

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CAS: 497-19-8 EINECS: 207-838-8	sodium carbonate  Xi R36  Eye Irrit. 2, H319	25-50%
CAS: 151-50-8 EINECS: 205-792-3	potassium cyanide  T+ R26/27/28;  N R50/53 R32  Acute Tox. 2, H300; Acute Tox. 1, H310; Acute Tox. 2, H330;  Aquatic Acute 1, H400; Aquatic Chronic 1, H410	7-<10%

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.
Do not induce vomiting; call for medical help immediately.
- **4.2 Most important symptoms and effects, both acute and delayed**
Cramp
Disziness
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.
- **6.3 Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

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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.

Unsuitable materials:

Lead, Aluminium, Zinc, Tin, Brass.

Plastics have to be proven for their resistibility.

· **Information about storage in one common storage facility:**

Do not store together with acids.

Storage class 6.1 B (Non-combustible acutely toxic Cat. 1 and 2 substances)

Only substances of the same storage class should be stored together.

Collocated storage with the following substances is prohibited:

- Pharmaceuticals, foods, and animal feeds including additives.

- Infectious, radioactive und explosive substances.

- Gases.

- Flammable liquids of storage class 3.

- Other explosive substances of storage class 4.1A.

- Flammable solid substances or desensitized substances of storage class 4.1B.

- Spontaneously flammable substances.

- Substances liberating flammable gases in contact with water.

- Strongly oxidizing substances of storage class 5.1A.

- Ammonium nitrate and preparations containing ammonium nitrate.

- Organic peroxides and self reactive substances.

Under certain conditions the collocated storage with the following sub-stances is permitted (For more details see TRGS 510):

- Oxidizing substances of storage class 5.1B.

- Combustible solids of storage class 11.

The substance should not be stored with substances with which hazardous chemical reactions are possible. (e.g. 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

· **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.

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· 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 through 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

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· General Information

· Appearance:

Form: Solid

Colour: Colourless

· **Odour:** Product specific

· **pH-value (55.0 g/l) at 20 °C:** >13

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- | | |
|---|---|
| · Change in condition | |
| Melting point/Melting range: Undetermined. | |
| Boiling point/Boiling range: Undetermined. | |
| · Flash point: | Not applicable. |
| · Self-igniting: | Product is not selfigniting. |
| · Danger of explosion: | Product does not present an explosion hazard. |
| · Explosion limits: | |
| Oxidising properties | None |
| · Density: | |
| Bulk density at 20 °C: | ca. 900 kg/m ³ |
| · 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**
- **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:**

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

1310-73-2 sodium hydroxide

Oral	LD50	2000 mg/kg (rat)
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497-19-8 sodium carbonate

Oral	LD50	4000 mg/kg (rat)
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151-50-8 potassium cyanide

Oral	LD50	5 mg/kg (rat)
	LDLO	2.86 mg/kg (human) (RTECS)

- **Primary irritant effect:**
- **on the skin:** Strong caustic effect on skin and mucous membranes.
- **on the eye:** Strong caustic effect.
- **Sensitisation:** No sensitising effects known.
- **Additional toxicological information:**
 The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:

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Corrosive
 Very toxic
 Danger through skin adsorption.
 Swallowing will lead to a strong caustic effect on mouth and throat and to the danger of perforation of esophagus and stomach.

SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

151-50-8 potassium cyanide

EC50	2 mg/l (48h) (Daphnia magna (water flea))
	1.8-1.9 mg/l (72h) (Eutosiphon sulcatum) (CN)
IC50	0.03 mg/l (8d) (Sc.quadricauda)
LC50	0.45 mg/l (96h) (Lepomis macrochirus (bluegrill))

· **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.

· 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.

SECTION 14: Transport information

· 14.1 UN-Number

· **ADR, IMDG, IATA** UN2923

· 14.2 UN proper shipping name

· **ADR** 2923 CORROSIVE SOLID, TOXIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM CYANIDE), ENVIRONMENTALLY HAZARDOUS

· **IMDG** CORROSIVE SOLID, TOXIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM CYANIDE), MARINE POLLUTANT

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· **IATA** CORROSIVE SOLID, TOXIC, N.O.S. (SODIUM HYDROXIDE, POTASSIUM CYANIDE)

· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 8 (CT2) Corrosive substances.
 · **Label** 8 +6.1

· **IMDG**



· **Class** 8 Corrosive substances.
 · **Label** 8 +6.1

· **IATA**



· **Class** 8 Corrosive substances.
 · **Label** 8 +6.1

· **14.4 Packing group**

· **ADR, IMDG, IATA** II

· **14.5 Environmental hazards:**

· **Marine pollutant:** Yes
 Symbol (fish and tree)
 · **Special marking (ADR):** Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Corrosive substances.
 · **Danger code (Kemler):** 86
 · **EMS Number:** F-A,S-B
 · **Segregation groups** Cyanides

· **14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

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**

· **Tunnel restriction code** 2
 E

· **IMDG**

· **Limited quantities (LQ)** 1 kg

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· **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.S.
 (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**

· **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.

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.

R26/27/28 Very toxic by inhalation, in contact with skin and if swallowed.

R32 Contact with acids liberates very toxic gas.

R35 Causes severe burns.

R36 Irritating to eyes.

R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

· **Contact:** Herr Marcus Müller

· **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

Acute Tox. 2: Acute toxicity, Hazard Category 2

Acute Tox. 3: Acute toxicity, Hazard Category 3

Acute Tox. 1: Acute toxicity, Hazard Category 1

Skin Corr. 1A: Skin corrosion/irritation, Hazard Category 1A

Eye Dam. 1: Serious eye damage/eye irritation, Hazard Category 1

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

Aquatic Acute 1: Hazardous to the aquatic environment - AcuteHazard, Category 1

Aquatic Chronic 1: Hazardous to the aquatic environment - Chronic Hazard, Category 1

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Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2

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· *** Data compared to the previous version altered.**

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