

**Safety Data Sheet**

according to UK REACH Regulation

**Elektrolyt Overhead**

Revision date: 09.12.2024

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**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Elektrolyt Overhead

UFI: XAJ7-Y9TT-3M2D-U9F6

**1.2. Relevant identified uses of the substance or mixture and uses advised against****Use of the substance/mixture**

Metal surface treatment products, including galvanic and electroplating products

**1.3. Details of the supplier of the safety data sheet**

Company name: Conzelmann Schweißhandels-gesellschaft mbH  
Street: Siemensstrasse 9  
Place: D-89331 Burgau  
Telephone: +49 (0) 8222/41388-0  
E-mail: office@conzelmann-gmbh.de  
Contact person: Zentrale

**1.4. Emergency telephone****number:** +49(0)551-19240 (GIZ-Nord, 24h)**SECTION 2: Hazards identification****2.1. Classification of the substance or mixture****GB CLP Regulation**

Met. Corr. 1; H290  
Skin Corr. 1B; H314  
Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

**2.2. Label elements****GB CLP Regulation****Hazard components for labelling**

Phosphoric acid

**Signal word:** Danger**Pictograms:****Hazard statements**

H290 May be corrosive to metals.  
H314 Causes severe skin burns and eye damage.

**Precautionary statements**

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.  
P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with

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P305+P351+P338	water or shower. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P390	Absorb spillage to prevent material damage.

#### 2.3. Other hazards

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.  
This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

**Chemical characterization**  
inorganic acids

##### Relevant ingredients

CAS No	Chemical name	Quantity
	EC No	
	Index No	
	REACH No	
	Classification (GB CLP Regulation)	
7664-38-2	Phosphoric acid	37,5 %
	231-633-2	
	01-2119485924-24	
	Met. Corr. 1, Acute Tox. 4, Skin Corr. 1B, Eye Dam. 1; H290 H302 H314 H318	
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	2 %
	203-961-6	
	01-2119475104-44	
	Eye Irrit. 2; H319	

Full text of H and EUH statements: see section 16.

##### Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
		Specific Conc. Limits, M-factors and ATE	
7664-38-2	231-633-2	Phosphoric acid	37,5 %
		dermal: LD50 = 2740 mg/kg; oral: LD50 = 1250 mg/kg Skin Corr. 1B; H314: >= 25 - 100 Skin Irrit. 2; H315: >= 10 - < 25 Eye Irrit. 2; H319: >= 10 - < 25	
112-34-5	203-961-6	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	2 %
		dermal: LD50 = 4120 mg/kg; oral: LD50 = 5660 mg/kg	

##### Labelling for contents according to Regulation (EC) No 648/2004

>= 30 % phosphates.

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down.

##### After inhalation

Provide fresh air. Medical treatment necessary.

##### After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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**After ingestion**

Rinse mouth immediately and drink plenty of water. Do NOT induce vomiting. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk.

**4.2. Most important symptoms and effects, both acute and delayed**

Causes severe skin burns and eye damage.

**4.3. Indication of any immediate medical attention and special treatment needed**

Treat symptomatically.

**SECTION 5: Firefighting measures****5.1. Extinguishing media****Suitable extinguishing media**

Water spray jet, Water mist, Foam, Dry extinguishing powder, Carbon dioxide (CO<sub>2</sub>)

**Unsuitable extinguishing media**

Full water jet

**5.2. Special hazards arising from the substance or mixture**

Non-flammable.

In case of fire may be liberated: Phosphorus oxides Carbon monoxide Carbon dioxide

**5.3. Advice for firefighters**

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

**Additional information**

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.

Do not allow entering drains or surface water.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures****General advice**

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.

**6.2. Environmental precautions**

Do not allow to enter into surface water or drains. Cover drains. Before discharge into sewage plants the product normally needs to be neutralised.

**6.3. Methods and material for containment and cleaning up****Other information**

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

**6.4. Reference to other sections**

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13 & Section 15: Regulatory Information (non-mandatory)

**SECTION 7: Handling and storage****7.1. Precautions for safe handling****Advice on safe handling**

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Wear suitable protective clothing, gloves and eye/face protection. When using do not eat, drink or smoke.

Wash hands before breaks and after work.

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#### Advice on protection against fire and explosion

No special fire protection measures are necessary.

#### Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink.

#### 7.2. Conditions for safe storage, including any incompatibilities

##### Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaust at critical locations.

Suitable floor material: acid-resistant

Suitable container/equipment material: acid-resistant, Refined steel, Polyolefins

Unsuitable container/equipment material: Steel, Aluminium, Zinc

##### Hints on joint storage

Do not store together with: alkali.

##### Further information on storage conditions

storage temperature 5 - 35 °C

#### 7.3. Specific end use(s)

Metal surface treatment products, including galvanic and electroplating products

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
112-34-5	2-(2-Butoxyethoxy)ethanol	10	67.5		TWA (8 h)	WEL
		15	101.2		STEL (15 min)	WEL
7664-38-2	Orthophosphoric acid	-	1		TWA (8 h)	WEL
		-	2		STEL (15 min)	WEL

#### 8.2. Exposure controls



##### Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray.

Technical measures and the application of suitable work processes have priority over personal protection equipment.

##### Individual protection measures, such as personal protective equipment

##### Eye/face protection

Suitable eye protection: goggles, Eye glasses with side protection (EN 166).

##### Hand protection

Suitable gloves type Butyl caoutchouc (butyl rubber), PVC (polyvinyl chloride).

Thickness of the glove material >= 0,5 mm

Breakthrough time: >= 8 h

Tested protective gloves must be worn EN ISO 374

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**Skin protection**

Wear suitable protective clothing. Rubber boots, Protective apron

**Respiratory protection**

In case of inadequate ventilation wear respiratory protection. Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Filtering device (full mask or mouthpiece) with filter: P2

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

**SECTION 9: Physical and chemical properties****9.1. Information on basic physical and chemical properties**

Physical state:	Liquid	
Colour:	light green	
Odour:	odourless	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		not determined
Flammability:		not applicable
		not applicable
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		1,9 (10 g/l)
Water solubility:		easily soluble
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		not determined
Density (at 20 °C):		1,23 +/- 0,03 g/cm <sup>3</sup>
Relative vapour density:		not determined

**9.2. Other information****Information with regard to physical hazard classes**

Self-ignition temperature

Solid: not applicable

Gas: not applicable

Oxidizing properties

Not oxidizing.

**Other safety characteristics**

Evaporation rate: not determined

Solid content: not determined

**SECTION 10: Stability and reactivity****10.1. Reactivity**

Corrosive to metals. Possibility of hazardous reactions.

Reacts with : alkali

**10.2. Chemical stability**

The product is stable under storage at normal ambient temperatures.

**10.3. Possibility of hazardous reactions**

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No known hazardous reactions.

#### 10.4. Conditions to avoid

none

#### 10.5. Incompatible materials

Aluminium, Steel, Zinc.

Keep away from: Base, Peroxides.

#### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

### SECTION 11: Toxicological information

#### 11.1. Information on hazard classes as defined in GB CLP Regulation

##### Acute toxicity

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

##### ATEmix calculated

ATE (oral) &gt; 2000 mg/kg; ATE (dermal) &gt; 2000 mg/kg; ATE (inhalation vapour) &gt; 20 mg/l; ATE (inhalation dust/mist) &gt; 5 mg/l

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7664-38-2	Phosphoric acid				
	oral	LD50 mg/kg 1250	Rat		
	dermal	LD50 mg/kg 2740	Rabbit		
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether				
	oral	LD50 mg/kg 5660	Rat		
	dermal	LD50 mg/kg 4120	Rabbit		

##### Irritation and corrosivity

Skin corrosion/irritation: Causes severe skin burns and eye damage.

Serious eye damage/eye irritation: Causes serious eye damage.

##### Sensitising effects

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

##### Carcinogenic/mutagenic/toxic effects 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.

##### Additional information on tests

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

### SECTION 12: Ecological information

#### 12.1. Toxicity

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The ecotoxicological properties of this mixture are determined by the ecotoxicological properties of the single components (see section 3).

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
7664-38-2	Phosphoric acid					
	Acute fish toxicity	LC50 mg/l	98-106	96 h	Lepomis macrochirus (Bluegill)	
	Acute algae toxicity	ErC50 mg/l	> 100	72 h	Desmodesmus subspicatus	OECD 201
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna (Big water flea)	OECD 202
	Algae toxicity	NOEC	100 mg/l	3 d	Desmodesmus subspicatus	OECD 201
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether					
	Acute algae toxicity	ErC50 mg/l	> 100		Scenedesmus subspicatus	
	Acute crustacea toxicity	EC50 mg/l	> 100	48 h	Daphnia magna (Big water flea)	

#### 12.2. Persistence and degradability

The product has not been tested.

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether			
	OECD 301 D	76%	28	
	Readily biodegradable (according to OECD criteria).			
	OECD 302 B	90-100%	8	
	Readily biodegradable (according to OECD criteria).			
	OECD 301 E	90-100%	14	
	Readily biodegradable (according to OECD criteria).			

#### 12.3. Bioaccumulative potential

The product has not been tested.

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
112-34-5	2-(2-butoxyethoxy)ethanol, diethylene glycol monobutyl ether	0,56 (25°C)

#### 12.4. Mobility in soil

The product has not been tested.

#### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

#### 12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

#### 12.7. Other adverse effects

No information available.

#### Further information

Avoid release to the environment.

### SECTION 13: Disposal considerations

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#### 13.1. Waste treatment methods

##### Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation.

##### List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

##### Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled.

### SECTION 14: Transport information

#### Land transport (ADR/RID)

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID, SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
 Hazard label: 8



Classification code: C1  
 Limited quantity: 5 L  
 Excepted quantity: E1  
 Transport category: 3  
 Hazard No: 80  
 Tunnel restriction code: E

#### Inland waterways transport (ADN)

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID, SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
 Hazard label: 8



Classification code: C1  
 Limited quantity: 5 L  
 Excepted quantity: E1

#### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 1805  
**14.2. UN proper shipping name:** PHOSPHORIC ACID SOLUTION  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
 Hazard label: 8



Special Provisions: 223  
 Limited quantity: 5 L



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Excepted quantity:	E1
EmS:	F-A, S-B
Segregation group:	acids

**Air transport (ICAO-TI/IATA-DGR)**

<b>14.1. UN number or ID number:</b>	UN 1805
<b>14.2. UN proper shipping name:</b>	PHOSPHORIC ACID SOLUTION
<b>14.3. Transport hazard class(es):</b>	8
<b>14.4. Packing group:</b>	III
Hazard label:	8



Special Provisions:	A3 A803
Limited quantity Passenger:	1 L
Passenger LQ:	Y841
Excepted quantity:	E1
IATA-packing instructions - Passenger:	852
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	856
IATA-max. quantity - Cargo:	60 L

**14.5. Environmental hazards**

ENVIRONMENTALLY HAZARDOUS: No

**14.6. Special precautions for user**

No information available.

**14.7. Maritime transport in bulk according to IMO instruments**

not applicable

**SECTION 15: Regulatory information**
**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**
**EU regulatory information**

 Restrictions on use (REACH, annex XVII):  
 Entry 3

Directive 2004/42/EC on VOC in paints and varnishes: 2 %

**Additional information**

Regulation (EC) No. 648/2004 [Detergents regulation].

**National regulatory information**

Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).

Water hazard class (D): 1 - slightly hazardous to water

**15.2. Chemical safety assessment**

Chemical safety assessments for substances in this mixture were not carried out.

**SECTION 16: Other information**

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**Abbreviations and acronyms**

Met. Corr: Corrosive to metals

Acute Tox: Acute toxicity

Skin Corr: Skin corrosion

Eye Dam: Eye damage

Eye Irrit: Eye irritation

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 Harmonized 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

LC50: Lethal concentration, 50%

LD50: Lethal dose, 50%

**Relevant H and EUH statements (number and full text)**

H290 May be corrosive to metals.

H302 Harmful if swallowed.

H314 Causes severe skin burns and eye damage.

H318 Causes serious eye damage.

H319 Causes serious eye irritation.

**Further Information**

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

*(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*