

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Electrolytic polishing solution A for CoCr

Revision date: 07.11.2023

Product code: 128-301

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

#### 1.1. Product identifier

Electrolytic polishing solution A for CoCr

#### Further trade names

Article No.: 128-301-00, 128-401-00

UFI: MGR2-8SXW-T622-EDMY

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

##### Use of the substance/mixture

Health services.

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

Company name:	DENTAURUM GmbH & Co. KG	Supplier:	DENTAURUM Australia Pty
Street:	Turnstr. 31	ABN:	79 055 919 787
Place:	D-75228 Ispringen	Street address:	18 Bertram St, Mortlake NSW 2137
Telephone:	+49 7231 803 0	Telephone:	+61 2 9743 4811
e-mail:	info@dentaurum.de	Fax No:	+61 2 9743 4599
Contact person:	Chemie	Contact:	Materials Manager
Internet:	www.dentaurum.com		

**1.4. Emergency telephone number:** +497231803-184 7:00-16:15 (Mo-Do) 7:00-13:15 (Fr)  
+497231803-0 16:15-18:00 (Mo-Do) 13:15-18:00 (Fr)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 4

Skin corrosion/irritation: Skin Irrit. 2

Serious eye damage/eye irritation: Eye Irrit. 2

Hazard Statements:

Harmful if swallowed.

Causes skin irritation.

Causes serious eye irritation.

#### 2.2. Label elements

##### Regulation (EC) No 1272/2008

##### Hazard components for labelling

ethanediol; ethylene glycol

**Signal word:** Warning

**Pictograms:**



##### Hazard statements

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.

##### Precautionary statements

P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
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P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

#### 2.3. Other hazards

No information available.

### SECTION 3: Composition/information on ingredients

#### 3.2. Mixtures

##### Chemical characterization

ethanediol; ethylene glycol. sulphuric acid > 10 %

##### Hazardous components

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
107-21-1	ethanediol; ethylene glycol			< 90 %
	203-473-3	603-027-00-1		
	Acute Tox. 4; H302			
7664-93-9	sulphuric acid ... %			> 10 %
	231-639-5	016-020-00-8		
	Skin Corr. 1A; H314			

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		
107-21-1	203-473-3	ethanediol; ethylene glycol	< 90 %
	dermal: LD50 = 10600 mg/kg; oral: ATE = 500 mg/kg		
7664-93-9	231-639-5	sulphuric acid ... %	> 10 %
	Skin Corr. 1A; H314: >= 15 - 100 Skin Irrit. 2; H315: >= 5 - < 15 Eye Irrit. 2; H319: >= 5 - < 15		

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

##### General information

Remove contaminated, saturated clothing immediately.

##### After inhalation

Provide fresh air. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

##### After contact with skin

After contact with skin, wash immediately with: Polyethylene glykol 400. Water.

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

If skin irritation occurs: Get medical advice/attention.

##### After contact with eyes

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

##### After ingestion

Medical treatment necessary. Do NOT induce vomiting. Rinse mouth immediately and drink 1 glass of of water.

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

No information available.

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**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**

Co-ordinate fire-fighting measures to the fire surroundings. Extinguishing powder. Carbon dioxide (CO<sub>2</sub>).  
Water spray.

**Unsuitable extinguishing media**

Full water jet.

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

Non-flammable.

**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. Use water spray jet to protect personnel and to cool endangered containers.

**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.

**6.3. Methods and material for containment and cleaning up****For cleaning up**

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 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.

**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. Do not eat, drink or smoke when using this product. Keep away from: Food and feedingstuffs

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

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#### Requirements for storage rooms and vessels

Keep container tightly closed. Store in a cool dry place.

Unsuitable materials for Container: Zinc. Do not store together with: Oxidizing agent.

#### Hints on joint storage

No special measures are necessary.

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

Health services.

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limit values

CAS No	Name of agent	ppm	mg/m <sup>3</sup>	fib/cm <sup>3</sup>	Category	Origin
107-21-1	Ethylene glycol	20	52		TWA (8 h)	
		40	104		STEL (15 min)	
7664-93-9	Sulphuric acid (mist)	-	0.05		TWA (8 h)	

#### 8.2. Exposure controls



##### Appropriate engineering controls

Avoid breathing vapours. Avoid contact with skin, eyes and clothes.

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

##### Eye/face protection

Suitable eye protection: goggles.

##### Hand protection

Recommendation:

Dermatril (740) Single-use gloves. NBR (Nitrile rubber). 0,11 mm penetration time (maximum wearing period): 480 min.

REF 162-907-00 (7/S), REF 162-908-00 (8/M), REF 162-909-00 (9/L)

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

##### Skin protection

Use of protective clothing. Use of protective clothing

##### Respiratory protection

In case of inadequate ventilation wear respiratory protection.

### SECTION 9: Physical and chemical properties

#### 9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	colourless
Odour:	characteristic

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Odour threshold:	not determined	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and boiling range:		190 °C
Flammability:		not applicable
		not applicable
Lower explosion limits:		3 vol. %
Upper explosion limits:		not determined
Flash point:		> 120 °C
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		0,5
Viscosity / kinematic:		not determined
Water solubility:		miscible.
Solubility in other solvents		
not determined		
Dissolution rate:		not determined
Partition coefficient n-octanol/water:		not determined
Dispersion stability:		not determined
Vapour pressure:		> 0,1 hPa
(at 20 °C)		
Vapour pressure:		not determined
Density (at 20 °C):		1,2 g/cm <sup>3</sup>
Relative density:		not determined
Bulk density:		not determined
Relative vapour density:		not determined
Particle characteristics:		not determined

#### 9.2. Other information

##### Information with regard to physical hazard classes

###### Explosive properties

The product is not: Explosive.

###### Sustaining combustion:

No data available

###### Self-ignition temperature

Solid:

not determined

Gas:

not determined

###### Oxidizing properties

The product is not: oxidising.

##### Other safety characteristics

###### Evaporation rate:

not determined

###### Solvent separation test:

not determined

###### Solvent content:

not determined

###### Solid content:

not determined

###### Sublimation point:

not determined

###### Softening point:

not determined

###### Pour point:

not determined

###### Viscosity / dynamic:

not determined

###### Flow time:

not determined

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

Possibility of hazardous reactions.

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### 10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

### 10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent. Reacts with : Oxidising agent. Alkaline earth metal. Alkali (lye). Alkali metals.

### 10.4. Conditions to avoid

none

### 10.5. Incompatible materials

Keep away from: Base, Oxidizing agent, Peroxides.

### 10.6. Hazardous decomposition products

No known hazardous decomposition products.

## SECTION 11: Toxicological information

### 11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

#### Acute toxicity

Harmful if swallowed.

#### ATEmix calculated

ATE (oral) 582,4 mg/kg

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
107-21-1	ethanediol; ethylene glycol				
	oral	ATE 500 mg/kg			
	dermal	LD50 10600 mg/kg	Rabbit	GESTIS	

#### Irritation and corrosivity

Causes skin irritation.

Causes serious eye irritation.

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

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

#### Further information

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 product is not: Ecotoxic.

### 12.2. Persistence and degradability

The product has not been tested.

### 12.3. Bioaccumulative potential

The product has not been tested.

### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
107-21-1	ethanediol; ethylene glycol	-1,36

### 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 REACH, annex XIII.

### 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. Do not allow to enter into surface water or drains.

## SECTION 13: Disposal considerations

### 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 - used product

110105 WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY; wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising); pickling acids; 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 3265

#### 14.2. UN proper shipping name:

CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (enthält Schwefelsäure)

#### 14.3. Transport hazard class(es):

8

#### 14.4. Packing group:

III

Hazard label:

8



Classification code:

C3

Special Provisions:

274

Limited quantity:

5 L

Excepted quantity:

E1

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Transport category: 3  
Hazard No: 80  
Tunnel restriction code: E

#### Marine transport (IMDG)

**14.1. UN number or ID number:** UN 3265  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (containing sulphuric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** III  
Hazard label: 8



Special Provisions: 223, 274  
Limited quantity: 5 L  
Excepted quantity: E1  
EmS: F-A, S-B

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

**14.1. UN number or ID number:** UN 3265  
**14.2. UN proper shipping name:** CORROSIVE LIQUID, ACIDIC, ORGANIC, N.O.S. (containing sulphuric acid)  
**14.3. Transport hazard class(es):** 8  
**14.4. Packing group:** 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

Warning: strongly corrosive.

#### 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, Entry 75

2004/42/EC (VOC): 85,85 % (1030,2 g/l)

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)



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**Additional information**

To follow: 850/2004/EC, 79/117/EEC, 689/2008/EC

**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****Changes**

This data sheet contains changes from the previous version in section(s): 1,4,6,7,8,9,10,11,12,13,15,16.

**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)

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%

CLP: Classification, labelling and Packaging

REACH: Registration, Evaluation and Authorization of Chemicals

GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals

UN: United Nations

DNEL: Derived No Effect Level

DMEL: Derived Minimal Effect Level

PNEC: Predicted No Effect Concentration

ATE: Acute toxicity estimate

LL50: Lethal loading, 50%

EL50: Effect loading, 50%

EC50: Effective Concentration 50%

ErC50: Effective Concentration 50%, growth rate

NOEC: No Observed Effect Concentration

BCF: Bio-concentration factor

PBT: persistent, bioaccumulative, toxic

vPvB: very persistent, very bioaccumulative

RID: Regulations concerning the international carriage of dangerous goods by rail

EmS: Emergency Schedules

MFAG: Medical First Aid Guide

ICAO: International Civil Aviation Organization

MARPOL: International Convention for the Prevention of Marine Pollution from Ships

IBC: Intermediate Bulk Container

VOC: Volatile Organic Compounds

SVHC: Substance of Very High Concern

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

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

H302 Harmful if swallowed.

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- |      |  |
|------|--|
| H314 | Causes severe skin burns and eye damage. |
| H315 | Causes skin irritation.                  |
| 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.

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