according to UK REACH Regulation

	Micronium Exc	lusiv	
Revision date: 28.03.2025	Product code: 610	0020-1	Page 1 of 9
SECTION 1: Identification of the s	ubstance/mixture and of the c	ompany/undertaking	
<u>1.1. Product identifier</u> Micronium Exclusiv			
Further trade names ArtNr.: 610020, 610099			
1.2. Relevant identified uses of the su	ubstance or mixture and uses adv	<u>rised against</u>	
Use of the substance/mixture Dentallegierung / dental alloy			
1.3. Details of the supplier of the safe	ety data sheet		
Company name:	Schütz Dental GmbH		
Street:	Dieselstrasse 5-6		
Place:	D-61191 Rosbach (Germany)		
Telephone:	+49 (0) 6003 814-0	Telefax:+49 (0) 6003 814-906	
E-mail:	info@schuetz-dental.de		
Contact person:	Dr. Uwe Krichbaum	Telephone: +49 (0) 6003 814-650	
Internet:	www.schuetz-dental.de		
Responsible Department:	Technische Dokumentation		
1.4. Emergency telephone	+49 (0) 6003 814-0 Schütz Denta	al (8:00 - 17:00 Uhr) or +49 (0) 6131 19240	
<u>number:</u>	University Mainz (24 h)		
SECTION 2: Hazards identification	n		

2.1. Classification of the substance or mixture

GB CLP Regulation

Carc. 1B; H350 Muta. 2; H341 Repr. 1B; H360F Resp. Sens. 1; H334 Skin Sens. 1; H317 Aquatic Chronic 4; H413

Full text of hazard statements: see SECTION 16.

In its quality as a compact metal, this product is not subject to any labelling obligation due to the calculation method of the "General Classification Guideline for Preparations of the EU" as issued in the latest valid version. The following labelling does not apply to the alloy, but to possible vapors, fumes and gases that may be produced during processing.

2.2. Label elements

GB CLP Regulation

Hazard components for labelling

cobalt Signal word:

d:

Pictograms:



Danger

Hazard statements

H317	
H334	
H341	

May cause an allergic skin reaction. May cause allergy or asthma symptoms or breathing difficulties if inhaled. Suspected of causing genetic defects.

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H350	May cause cancer.	
H360F	May damage fertility.	
H413	May cause long lasting harmful effects to aquatic life.	
Precautionary statemer	nts	
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.	
P273	Avoid release to the environment.	
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.	
P284	In case of inadequate ventilation wear respiratory protection.	
P302+P352	IF ON SKIN: Wash with plenty of Water.	
P362+P364	Take off contaminated clothing and wash it before reuse.	
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.	
P342+P311	If experiencing respiratory symptoms: Call a POISON CENTER/doctor.	
P501	Dispose of waste according to applicable legislation.	
Special labelling of cert	ain mixtures	
	Restricted to professional users.	
Labelling of packages v	vhere the contents do not exceed 125 ml	
Signal word:	Danger	
Pictograms:		



H317-H334-H341-H350-H360F-H413

Precautionary statements

P261-P280-P284-P302+P352-P362+P364-P304+P340-P342+P311-P501

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (GB CLP Regulation)		
7440-48-4	cobalt			50 - < 75 %
	231-158-0	027-001-00-9		
	Carc. 1B, Muta. 2, Repr. 1B, Resp H334 H317 H413	. Sens. 1, Skin Sens. 1, Aquatic Chro	nic 4; H350 H341 H360F	
7440-47-3	chromium			25 - < 50 %
	231-157-5			

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		
7440-48-4	231-158-0	cobalt	50 - < 75 %
	oral: LD50 = 6.170 mg/kg mg/kg		

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SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation

Provide fresh air. Rinse mouth thoroughly with water. Call a doctor if you feel unwell.

After contact with skin

Wash with plenty of water and soap.

After contact with eyes

After eye contact: Rinse immediately carefully and thoroughly with eye-bath or water. Protect uninjured eye. Consult an ophthalmologist.

After ingestion

Rinse mouth immediately and drink 1 glass of of water. Call a doctor if you feel unwell.

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

No information available.

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. Special treatment D (Fires of metals)

Unsuitable extinguishing media

Water

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: Metal oxide smoke, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit. In case of fire and/or explosion do not breathe fumes.

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 dust formation.

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

Take up mechanically. 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

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gas/fumes/vapour/spray.

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Wash hands before breaks and after work. When using do not eat, drink, smoke, sniff.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels Keep container tightly closed.

Hints on joint storage

No special measures are necessary.

7.3. Specific end use(s)

Dentallegierung / dental alloy

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
7440-47-3	Chromium	-	0.5		TWA (8 h)	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.

Individual protection measures, such as personal protective equipment

Eye/face protection

Wear eye/face protection.

Hand protection

Tested protective gloves must be worn Suitable material: Butyl caoutchouc (butyl rubber) NBR (Nitrile rubber) NR (natural rubber, Natural latex) Permeation time (maximum wear duration): 0,3 mm: 60 min. Permeation time (maximum wear duration): 0,11 mm: 10 min.

Skin protection

Use of protective clothing.

Respiratory protection

In case of inadequate ventilation wear respiratory protection. Filter type: FFP2 / P3 $\,$

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:

solid

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Colour:		
Odour:	odourless	
Melting point/freezing point:	1.340-1.410 °C	
Boiling point or initial boiling point and boiling range:	> 2000 °C	
Flammability:	not determined	
Lower explosion limits:	not determined	
Upper explosion limits:	not determined	
Flash point:	unbekannt	
Auto-ignition temperature:	not determined	
Decomposition temperature:	not determined	
pH-Value:	not determined	
Viscosity / kinematic:	not determined	
Water solubility:	No	
Solubility in other solvents not determined		
Partition coefficient n-octanol/water:	not determined	
Vapour pressure:	not determined	
Density:	8,3 g/cm³	
Relative vapour density:	not determined	
Particle characteristics:	not applicable	
9.2. Other information		
Information with regard to physical haz	ard classes	
Explosive properties		
The product is not: Explosive.		
Oxidizing properties		
The product is not: oxidising.		
Other safety characteristics		
Solid content:	100 %	
SECTION 10: Stability and reactivity		

10.1. Reactivity

No hazardous reaction when handled and stored according to provisions.

10.2. Chemical stability

The product is stable under storage at normal ambient temperatures.

10.3. Possibility of hazardous reactions

No known hazardous reactions.

10.4. Conditions to avoid

none

10.5. Incompatible materials

No information available.

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.

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ATEmix calculated

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
7440-48-4	cobalt			-	
	oral	LD50 6.170 mg/kg mg/kg			

Irritation and corrosivity

Skin corrosion/irritation: Based on available data, the classification criteria are not met. Serious eye damage/eye irritation: Based on available data, the classification criteria are not met.

Sensitising effects

May cause allergy or asthma symptoms or breathing difficulties if inhaled. (cobalt) May cause an allergic skin reaction. (cobalt)

Carcinogenic/mutagenic/toxic effects for reproduction

May cause cancer. (cobalt) Suspected of causing genetic defects. (cobalt) May damage fertility. (cobalt)

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

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP]. Special hazards arising from the substance or mixture!

SECTION 12: Ecological information

12.1. Toxicity

May cause long lasting harmful effects to aquatic life.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

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. The product has not been tested.

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

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

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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. Recycling/reclamation of metals and metal compounds For recycling, contact recycling exchanges.

List of Wastes Code - residues/unused products

060405 WASTES FROM INORGANIC CHEMICAL PROCESSES; metal-containing wastes other than those mentioned in 06 03; wastes containing other heavy metals; hazardous waste

Contaminated packaging

Completely emptied packages can be recycled. Handle contaminated packages in the same way as the substance itself.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Inland waterways transport (ADN)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Marine transport (IMDG)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
Air transport (ICAO-TI/IATA-DGR)	
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.
14.4. Packing group:	No dangerous good in sense of this transport regulation.
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 reg	ulations/legislation specific for the substance or mixture
EU regulatory information	
Restrictions on use (REACH, annex XVII)).
	/•

Entry 28, Entry 75 Information according to Directive 2012/18/EU (SEVESO III):

Not subject to 2012/18/EU (SEVESO III)

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National regulatory information		
Employment restrictions:	Observe restrictions to employment for juveniles accor work protection guideline' (94/33/EC). Observe employ under the Maternity Protection Directive (92/85/EEC) for nursing mothers.	ment restrictions
Water hazard class (D):	3 - highly hazardous to water	
Skin resorption/Sensitization:	Causes allergic hypersensitivity reactions.	

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): 1,2.

Abbreviations and acronyms

Resp. Sens: Respiratory sensitisation Skin Sens: Skin sensitisation Muta: Germ cell mutagenicity Carc: Carcinogenicity Repr: Reproductive toxicity Aquatic Chronic: Chronic aquatic hazard 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** EC/EEC: European Community/European Economic Community EU: European Union CAS: Chemical Abstracts Service DNEL: Derived No Effect Level DMEL: Derived Minimal Effect Level PNEC: Predicted No Effect Concentration ATE: Acute toxicity estimate LC50: Lethal concentration, 50% LD50: Lethal dose, 50% 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 M-factor: Multiplying factor ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road) RID: Regulations concerning the international carriage of dangerous goods by rail MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container 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).

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Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Carc. 1B; H350	Calculation method
Muta. 2; H341	Calculation method
Repr. 1B; H360F	Calculation method
Resp. Sens. 1; H334	Calculation method
Skin Sens. 1; H317	Calculation method
Aquatic Chronic 4; H413	Calculation method

Relevant H and EUH statements (number and full text)

May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing genetic defects.
May cause cancer.
May damage fertility.
May cause long lasting harmful effects to aquatic life.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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