

## Silver jewelry bath

Beco Technic GmbH  
21502 Geesthacht

Date printed 06.11.2019, Revision 02.07.2018

Version 05. Supersedes version: 04

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

**Article number: 141279, 141209C1, 86586681, 83507829, 86426439,  
DIA141279, 141279TS, 141220, 141209N, 87152138, 141279OV, 141106**

**1.2 Relevant identified uses of the substance or mixture and uses advised against****1.2.1 Relevant uses**

Cleaning agent

**1.2.2 Uses advised against**

None known.

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

Beco Technic GmbH  
Hermisdorfer Str. 5  
21502 Geesthacht / GERMANY  
Phone +49 (0) 41 52 / 80 96 56  
Fax +49 (0) 41 52 / 80 96 96  
Homepage [www.beco-technic.com](http://www.beco-technic.com)  
E-mail [service@beco-lifestyle.com](mailto:service@beco-lifestyle.com)

**Address enquiries to****Technical information**[info@beco-technic.com](mailto:info@beco-technic.com)**Safety Data Sheet**[sdb@chemiebuero.de](mailto:sdb@chemiebuero.de)**1.4 Emergency telephone number****Advisory body**

+49 (0) 551-19240 (24h, available English / German)

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture [REGULATION (EC) No 1272/2008]**

Eye Dam. 1: H318 Causes serious eye damage.  
Skin Irrit. 2: H315 Causes skin irritation.

**2.2 Label elements**

The product is required to be labelled in accordance with regulation (EC) No 1272/2008 (CLP).

**Hazard pictograms****Signal word**

DANGER

**Contains:**

Hydrochloric acid

Fatty alcohols, C10-16, ethoxylated propoxylated

**Hazard statements**

H318 Causes serious eye damage.  
H315 Causes skin irritation.

**Precautionary statements**

P101 If medical advice is needed, have product container or label at hand.  
P102 Keep out of reach of children.  
P280 Wear protective gloves / eye protection / face protection.  
P305+P351+P338 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.

**Cleaner, 648/2004/CE, contains:**

< 5% non-ionic surfactants  
fragrances CITRONELLOL  
fragrances

**2.3 Other hazards****Other hazards**

Further hazards were not determined with the current level of knowledge.

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**SECTION 3: Composition / Information on ingredients****Product-type:**

3.2 The product is a mixture.

Range [%]	Substance
1 - < 5	Propan-2-ol
	CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0
	GHS/CLP: Flam. Liq. 2: H225 - Eye Irrit. 2: H319 - STOT SE 3: H336
1 - < 3	Fatty alcohols, C10-16, ethoxylated propoxylated
	CAS: 69227-22-1, EINECS/ELINCS: 614-942-0
	GHS/CLP: Eye Dam. 1: H318 - Acute Tox. 4: H302
1 - < 5	Hydrochloric acid
	CAS: 7647-01-0, EINECS/ELINCS: 231-595-7, EU-INDEX: 017-002-01-X
	GHS/CLP: Skin Corr. 1B: H314 - STOT SE 3: H335 - Met. Corr. 1: H290
0,1 - < 1	Thiourea
	CAS: 62-56-6, EINECS/ELINCS: 200-543-5, EU-INDEX: 612-082-00-0
	GHS/CLP: Carc. 2: H351 - Repr. 2: H361d - Acute Tox. 4: H302 - Aquatic Chronic 2: H411

**Comment on component parts**

Substances of Very High Concern - SVHC: substances are not contained or are below 0.1%.  
For full text of H-statements: see SECTION 16.

**SECTION 4: First aid measures****4.1 Description of first aid measures****General information**

Take off contaminated clothing and wash before reuse.

**Inhalation**

Ensure supply of fresh air.

**Skin contact**

In case of contact with skin wash off with warm water.  
Consult a doctor if skin irritation persists.

**Eye contact**

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.

**Ingestion**

Get medical advice.  
Do not induce vomiting.  
Rinse out mouth and give plenty of water to drink.

**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.  
If swallowed or in the event of vomiting, risk of product entering the lungs.  
Forward this sheet to the doctor.

**SECTION 5: Fire-fighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Foam, dry powder, water spray jet, carbon dioxide.

**Extinguishing media that must not be used**

Full water jet.

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

Risk of formation of toxic pyrolysis products.

**5.3 Advice for firefighters**

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.

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

Ensure adequate ventilation.  
High risk of slipping due to leakage/spillage of product.  
Use personal protective equipment.

**6.2 Environmental precautions**

Prevent spread over a wide area (e.g. by containment or oil barriers).  
Do not discharge into the drains/surface waters/groundwater.

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

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).  
Dispose of absorbed material in accordance within the regulations.

**6.4 Reference to other sections**

See SECTION 8+13

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

Use only in well-ventilated areas.

Do not eat, drink or smoke when using this product.  
Wash hands before breaks and after work.  
Use barrier skin cream.  
Contaminated work clothing should not be allowed out of the workplace.  
Take off contaminated clothing and wash before reuse.

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

Keep only in original container.  
Provide acid-resistant floor.  
  
Do not store with alkalies.  
Do not store together with oxidizing agents.  
Do not store together with food and animal food/diet.  
  
Keep container tightly closed.  
Keep container in a well-ventilated place.  
Protect from heat/overheating.

**7.3 Specific end use(s)**

See product use, SECTION 1.2

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**SECTION 8: Exposure controls / personal protection**
**8.1 Control parameters**
**Ingredients with occupational exposure limits to be monitored (GB)**

Substance
Hydrochloric acid
CAS: 7647-01-0, EINECS/ELINCS: 231-595-7, EU-INDEX: 017-002-01-X
Long-term exposure: 1 ppm, 2 mg/m <sup>3</sup> , gas and aerosol mists
Short-term exposure (15-minute): 5 ppm, 8 mg/m <sup>3</sup>
Propan-2-ol
CAS: 67-63-0, EINECS/ELINCS: 200-661-7, EU-INDEX: 603-117-00-0
Long-term exposure: 400 ppm, 999 mg/m <sup>3</sup>
Short-term exposure (15-minute): 500 ppm, 1250 mg/m <sup>3</sup>

**Ingredients with occupational exposure limits to be monitored (EU)**

Substance / EC LIMIT VALUES
Hydrochloric acid
CAS: 7647-01-0, EINECS/ELINCS: 231-595-7, EU-INDEX: 017-002-01-X
Eight hours: 5 ppm, 8 mg/m <sup>3</sup>
Short-term (15-minute): 10 ppm, 15 mg/m <sup>3</sup>

**8.2 Exposure controls**

<b>Additional advice on system design</b>	Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance requirements of DIN EN 482. For example, recommendations are given in the IFA's list of hazardous substances.
<b>Eye protection</b>	Safety glasses. (EN 166:2001)
<b>Hand protection</b>	The details concerned are recommendations. Please contact the glove supplier for further information. In full contact: > 0,5 mm; Butyl rubber, >480 min (EN 374-1/-2/-3). In splash contact: > 0,5 mm; Butyl rubber, >120 min (EN 374-1/-2/-3).
<b>Skin protection</b>	Not required under normal conditions.
<b>Other</b>	Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier. Avoid contact with eyes and skin.
<b>Respiratory protection</b>	Not required under normal conditions. Breathing apparatus in the event of aerosol or mist formation. Short term: filter apparatus, filter A. (DIN EN 14387)
<b>Thermal hazards</b>	not applicable
<b>Delimitation and monitoring of the environmental exposition</b>	Comply with applicable environmental regulations limiting discharge to air, water and soil.

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## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

Form	liquid
Color	colourless
Odor	characteristic
Odour threshold	No information available.
pH-value	<1
pH-value [1%]	No information available.
Boiling point [°C]	100
Flash point [°C]	>65
Flammability (solid, gas) [°C]	not applicable
Lower explosion limit	No information available.
Upper explosion limit	No information available.
Oxidising properties	no
Vapour pressure/gas pressure [kPa]	No information available.
Density [g/ml]	1
Bulk density [kg/m³]	not applicable
Solubility in water	miscible
Partition coefficient [n-octanol/water]	No information available.
Viscosity	No information available.
Relative vapour density determined in air	No information available.
Evaporation speed	No information available.
Melting point [°C]	No information available.
Autoignition temperature [°C]	No information available.
Decomposition temperature [°C]	No information available.

### 9.2 Other information

No information available.

## SECTION 10: Stability and reactivity

### 10.1 Reactivity

No dangerous reactions known if used as directed.

### 10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

### 10.3 Possibility of hazardous reactions

Reactions with alkalies (lyes).  
Reactions with strong oxidizing agents.

### 10.4 Conditions to avoid

Strong heating.

### 10.5 Incompatible materials

See SECTION 10.3.

### 10.6 Hazardous decomposition products

No hazardous decomposition products known.

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**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity**

Product
ATE-mix, oral, > 2000 mg/kg bw.
Substance
Fatty alcohols, C10-16, ethoxylated propoxylated, CAS: 69227-22-1
LD50, oral, 1800 mg/kg.
Hydrochloric acid, CAS: 7647-01-0
LD50, oral, Rat: 700 mg/kg bw (IUCLID).
LD50, dermal, Rabbit: > 5010 mg/kg.
Thiourea, CAS: 62-56-6
LD50, dermal, Rabbit: > 2000 mg/kg (Lit.).
LD50, oral, Rat: 1750 mg/kg (Lit.).
Propan-2-ol, CAS: 67-63-0
LD50, dermal, Rabbit: 13400 mg/kg.
LD50, oral, Rat: 4570 mg/kg.
LC50, inhalative, Rat: 30 mg/l 4h.

<b>Serious eye damage/irritation</b>	Risk of serious damage to eyes. The classification is due to the extreme pH.
<b>Skin corrosion/irritation</b>	In-vitro-Test "Corrosive" negative. Irritant Expert judgement
<b>Respiratory or skin sensitisation</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Specific target organ toxicity — single exposure</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Specific target organ toxicity — repeated exposure</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Mutagenicity</b>	Toxicological data of complete product are not available. Based on the available information, the classification criteria are not fulfilled.
<b>Reproduction toxicity</b>	Toxicological data of complete product are not available. This product contains one or more substances of categorie Repr. 2 (CLP). Based on the available information, the classification criteria are not fulfilled.
<b>Carcinogenicity</b>	Toxicological data of complete product are not available. This product contains one or more substances of categorie Carc. 2 (CLP). Based on the available information, the classification criteria are not fulfilled.
<b>Aspiration hazard</b>	Based on the available information, the classification criteria are not fulfilled.
<b>General remarks</b>	

The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

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## SECTION 12: Ecological information

### 12.1 Toxicity

Product
Based on the available information, the classification criteria are not fulfilled.:
Substance
Fatty alcohols, C10-16, ethoxylated propoxylated, CAS: 69227-22-1
LC50, Brachidanio rerio: > 1-10 mg/l (DIN EN ISO 7346-2).
EC0, Pseudomonas putida: > 100 mg/l (OECD-209).
Hydrochloric acid, CAS: 7647-01-0
LC50, (96h), Lepomis macrochirus: 24,6 mg/l.
EC50, (72h), Pseudokirchneriella subcapitata: 0,78 mg/l.
EC50, (48h), Daphnia magna: 0,492 mg/l.
Thiourea, CAS: 62-56-6
LC50, (96h), Danio rerio: 10000 mg/l (Lit.).
EC50, (48h), Daphnia magna: 35 mg/l (IUCLID).
IC50, (72h), Desmodesmus subspicatus: 3,8 - 10 mg/l (IUCLID).
Propan-2-ol, CAS: 67-63-0
EC50, (72h), Scenedesmus subspicatus: > 100 mg/l.
EC50, (48h), Daphnia magna: 13299 mg/l.

### 12.2 Persistence and degradability

Behaviour in environment compartments	No information available.
Behaviour in sewage plant	The product is an acid. Neutralization is normally necessary before a waste water is discharged into sewage treatment plants.
Biological degradability	The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

### 12.3 Bioaccumulative potential

No information available.

### 12.4 Mobility in soil

No information available.

### 12.5 Results of PBT and vPvB assessment

Based on all available information not to be classified as PBT or vPvB respectively.

### 12.6 Other adverse effects

Harmful effect due to pH shift.  
Ecological data of complete product are not available.  
Do not discharge product unmonitored into the environment or into the drainage.

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**SECTION 13: Disposal considerations**
**13.1 Waste treatment methods**

Waste material c It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

**Product**

Coordinate disposal with the disposal contractor/authorities if necessary.  
Dispose of as hazardous waste.

**Waste no. (recommended)**

070699  
200129\*

**Contaminated packaging**

Uncontaminated packaging may be taken for recycling.  
Packaging that cannot be cleaned should be disposed of as for product.

**Waste no. (recommended)**

150110\*

**SECTION 14: Transport information**
**14.1 UN number**

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

**14.2 UN proper shipping name**

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS "DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS "DANGEROUS GOODS"

**14.3 Transport hazard class(es)**

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable

Air transport in accordance with IATA not applicable

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**14.4 Packing group**

Transport by land according to ADR/RID	not applicable
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Inland navigation (ADN)	not applicable
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Marine transport in accordance with IMDG	not applicable
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Air transport in accordance with IATA	not applicable
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**14.5 Environmental hazards**

Transport by land according to ADR/RID	no
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Inland navigation (ADN)	no
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Marine transport in accordance with IMDG	no
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Air transport in accordance with IATA	no
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**14.6 Special precautions for user**

Relevant information under SECTION 6 to 8.

**14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code**

not applicable

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

EEC-REGULATIONS	1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008; 75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU) 2016/131; (EU) 517/2014
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TRANSPORT-REGULATIONS	ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019)
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NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits (Second edition, published December 2011).
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- Observe employment restrictions for people	Observe employment restrictions for young people. Observe employment restrictions for mothers-to-be and nursing mothers.
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- VOC (2010/75/CE)	ca. 3%
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**15.2 Chemical safety assessment**

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

**SECTION 16: Other information****16.1 Hazard statements (SECTION 03)**

H336 May cause drowsiness or dizziness.  
H319 Causes serious eye irritation.  
H225 Highly flammable liquid and vapour.  
H290 May be corrosive to metals.  
H335 May cause respiratory irritation.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H411 Toxic to aquatic life with long lasting effects.  
H302 Harmful if swallowed.  
H361d Suspected of damaging the unborn child.  
H351 Suspected of causing cancer.

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## 16.2 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route  
 RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses  
 ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure  
 ATE = acute toxicity estimate  
 CAS = Chemical Abstracts Service  
 CLP = Classification, Labelling and Packaging  
 DMEL = Derived Minimum Effect Level  
 DNEL = Derived No Effect Level  
 EC50 = Median effective concentration  
 ECB = European Chemicals Bureau  
 EEC = European Economic Community  
 EINECS = European Inventory of Existing Commercial Chemical Substances  
 ELINCS = European List of Notified Chemical Substances  
 GHS = Globally Harmonized System of Classification and Labelling of Chemicals  
 IATA = International Air Transport Association  
 IBC-Code = International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk  
 IC50 = Inhibition concentration, 50%  
 IMDG = International Maritime Code for Dangerous Goods  
 IUCLID = International Uniform Chemical Information Database  
 LC50 = Lethal concentration, 50%  
 LD50 = Median lethal dose  
 LC0 = lethal concentration, 0%  
 LOAEL = lowest-observed-adverse-effect level  
 MARPOL = International Convention for the Prevention of Marine Pollution from Ships  
 NOAEL = No Observed Adverse Effect Level  
 NOEC = No Observed Effect Concentration  
 PBT = Persistent, Bioaccumulative and Toxic substance  
 PNEC = Predicted No-Effect Concentration  
 REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals  
 STP = Sewage Treatment Plant  
 TLV®/TWA = Threshold limit value – time-weighted average  
 TLV®STEL = Threshold limit value – short-time exposure limit  
 VOC = Volatile Organic Compounds  
 vPvB = very Persistent and very Bioaccumulative

## 16.3 Other information

## Classification procedure

Eye Dam. 1: H318 Causes serious eye damage. (Calculation method)  
 Skin Irrit. 2: H315 Causes skin irritation. (Expert judgement)

## Modified position

none

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