

**Safety data sheet**  
according to 1907/2006/EC, Article 31

Printing date 11.09.2018

Revision: 11.09.2018

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

- English additional compounds
- 1.1 Product identifier
- Product Name: Gold Tuning Solution, Part Number 8500-7000
- Part Number: 8500-7000
- 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  
Reagents and Standards for Analytical Chemistry Laboratory Use  
A 100mL Solution
- 1.3 Details of the supplier of the safety data sheet
- Manufacturer/Supplier:  
Agilent Technologies Manufacturing GmbH & Co. KG  
Hewlett-Packard-Str. 8  
76337 Waldbronn  
Germany
- Further information obtainable from: product safety department
- 1.4 Emergency telephone number: CHEMTREC®: +(44)-870-8200418

**SECTION 2: Hazards identification**

- 2.1 Classification of the substance or mixture
- Classification according to Regulation (EC) No 1272/2008 The product is not classified, according to the CLP regulation.
- 2.2 Label elements
- Labelling according to Regulation (EC) No 1272/2008 Not Regulated
- Hazard pictograms Not Regulated
- Signal word Not Regulated
- Hazard statements Not Regulated
- 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: 7647-01-0 EINECS: 231-595-7	hydrochloric acid	⚠ Skin Corr. 1B, H314; ⚠ Acute Tox. 4, H302; STOT SE 3, H335	2.0%
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**· CHEMICAL IDENTIFICATION OF THE SUBSTANCE/PREPARATION**

CAS: 7440-57-5 EINECS: 231-165-9	Gold	0.01%
CAS: 7732-18-5 EINECS: 231-791-2	water, distilled, conductivity or of similar purity	97.99%

- Additional information: For the wording of the listed hazard phrases refer to section 16.

**SECTION 4: First aid measures**

- 4.1 Description of first aid measures
- General information: No special measures required.
- After inhalation: Supply fresh air; consult doctor in case of complaints.
- After skin contact: Generally the product does not irritate the skin.
- After eye contact: Rinse opened eye for several minutes under running water.
- After swallowing: Do not give anything to eat or drink - Do not induce vomiting
- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.
- 4.3 Indication of any immediate medical attention and special treatment needed No further relevant information available.

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### 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** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

### SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures** Not required.
- **6.2 Environmental precautions:** No special measures required.
- **6.3 Methods and material for containment and cleaning up:**  
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
- **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**  
No special measures required.  
Follow good laboratory practices.
- **Information about fire - and explosion protection:** No special measures required.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:** None.
- **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.

- **8.1 Control parameters**

- **Ingredients with limit values that require monitoring at the workplace:**

**7647-01-0 hydrochloric acid**

WEL	Short-term value: 8 mg/m <sup>3</sup> , 5 ppm Long-term value: 2 mg/m <sup>3</sup> , 1 ppm (gas and aerosol mists)
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- **Additional information:** The lists valid during the making were used as basis.

- **8.2 Exposure controls**

- **Personal protective equipment:**
- **General protective and hygienic measures:** The usual precautionary measures are to be adhered to when handling chemicals.
- **Respiratory protection:** Not required.
- **Protection of hands:**  
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.  
Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.  
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- **Material of gloves**  
Nitrile Glove  
Thickness: ≥0.11 mm  
Breakthrough time: > 480 minutes
- **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.

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

Form:	Liquid
Colour:	Colourless
Odour:	Odourless
Odour threshold:	Not applicable.

· **pH-value:** <1

**Change in condition**

Melting point/freezing point:	0°C (32°F)
Initial boiling point and boiling range:	100°C (212°F)

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Decomposition temperature:** Not applicable.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

**Explosion limits:**

Lower:	Not applicable.
Upper:	Not applicable.

· **Vapour pressure at 20 °C:** 23 hPa

· **Density:** 1.0 g/mL @ 20°C

· **Relative density:** Not applicable.

· **Vapour density:** Not applicable.

· **Evaporation rate:** Not applicable.

**Solubility in / Miscibility with water:**

Miscible

· **Partition coefficient: n-octanol/water:** Not applicable.

**Viscosity:**

Dynamic:	Not applicable.
Kinematic:	Not applicable.

**Solvent content:**

Water:	98.0 %
VOC (EC)	0.00 %

· **Solids content:** 0.0 %

· **9.2 Other information:** No further relevant information available.

**SECTION 10: Stability and reactivity**

· **10.1 Reactivity:** No further relevant information available.

· **10.2 Chemical stability:**

· **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.

· **10.3 Possibility of hazardous reactions:** No dangerous reactions known.

· **10.4 Conditions to avoid:** No further relevant information available.

· **10.5 Incompatible materials:** No further relevant information available.

· **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

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**SECTION 11: Toxicological information**

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.
- **Primary irritant effect:**
- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
- **CMR effects (carcinogenicity, mutagenicity and toxicity 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.


**SECTION 12: Ecological information**

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **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:** Generally not hazardous for water
- **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** Smaller quantities can be disposed of with household waste.
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.

**SECTION 14: Transport information**

- |   |                         |
|---|-------------------------|
| · <b>14.1 UN-Number</b>   |                         |
| · <b>ADR, IMDG, IATA</b>  | UN1789                  |
| · <b>14.2 UN proper shipping name</b>   |                         |
| · <b>ADR</b>  | 1789 HYDROCHLORIC ACID  |
| · <b>IMDG, IATA</b>   | HYDROCHLORIC ACID       |
| · <b>14.3 Transport hazard class(es)</b>  |                         |
| · <b>ADR, IMDG, IATA</b>  |                         |
|  |                         |
| · <b>Class</b>  | 8 Corrosive substances. |
| · <b>Label</b>  | 8                       |
| · <b>14.4 Packing group</b>   |                         |
| · <b>ADR, IMDG, IATA</b>  | III                     |

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· <b>14.5 Environmental hazards:</b>	Not applicable.
· <b>14.6 Special precautions for user</b>	Warning: Corrosive substances.
· <b>Danger code (Kemler):</b>	80
· <b>EMS Number:</b>	F-A,S-B
· <b>Segregation groups</b>	Acids
· <b>Stowage Category</b>	E
· <b>14.7 Transport in bulk according to Annex II of Marpol and the IBC Code</b>	Not applicable.
· <b>Transport/Additional information:</b>	
· <b>ADR</b>	5L
· <b>Limited quantities (LQ)</b>	Code: E1
· <b>Excepted quantities (EQ)</b>	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>Transport category</b>	3
· <b>Tunnel restriction code</b>	E
· <b>IMDG</b>	5L
· <b>Limited quantities (LQ)</b>	Code: E1
· <b>Excepted quantities (EQ)</b>	Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· <b>UN "Model Regulation":</b>	UN 1789 HYDROCHLORIC ACID, 8, III

### SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 16: Other information

*Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.*

- **Relevant phrases**  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H335 May cause respiratory irritation.
- **Department issuing SDS:** product safety department
- **Contact:**  
Agilent Technologies Manufacturing GmbH & Co. KG  
0800 603 1000  
pdl-msds\_author@agilent.com
- **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 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)  
VOC: Volatile Organic Compounds (USA, EU)  
PBT: Persistent, Bioaccumulative and Toxic  
vPvB: very Persistent and very Bioaccumulative  
Acute Tox. 4: Acute toxicity – Category 4  
Skin Corr. 1B: Skin corrosion/irritation – Category 1B  
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3