

Printing date 10.01.2020

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| 1.1 Product id | entifier |
|----------------------------------|---|
| Trade name: (| GOLD 1000 PPM A/S STANDARD |
| Article numbe | |
| 1.2 Relevant id | lentified uses of the substance or mixture and uses advised against |
| | vant information available. |
| Application of | the substance / the mixture Laboratory chemicals |
| 1.3 Details of t Manufacturer | he supplier of the safety data sheet /Supplier: |
| PerkinElmer, 1 | nc |
| 710 Bridgepor | |
| | ecticut 06484 USA |
| | US@perkinelmer.com |
| 203-925-4600 | |
| PerkinElmer, 1 | nc. |
| | Buckinghamshire |
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| | siness Park, Unit A |
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| P: 44 1443 234 | |
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| | within US) 800-424-9300 |
| | from outside US) $+1$ 703-527-3887 (call collect) |
| CHEMTREC (| within AU) +(61)-290372994 |
| SECTION 2 | : Hazards identification |
| | ion of the substance or mixture |
| | according to Regulation (EC) No 1272/2008 |
| GHS GHS | SO5 corrosion |
| | |
| | |
| Eye Dam. 1 H | 318 Causes serious eye damage. |
| \wedge | |
| GHS | 207 |
| | |
| • | 315 Causes skin irritation. |
| Skin Irrit 9 U | |
| | 335 May cause respiratory irritation. |



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| Hazard pictogra Signal word Da | ams GHS05, GHS07 inger |
|-----------------------------------|---|
| | ining components of labelling: |
| Hydrochloric A | |
| Hazard stateme | |
| H315 Causes sk | |
| | prious eye damage. |
| | e respiratory irritation. |
| Precautionary s | |
| P261 | Avoid breathing dust/fume/gas/mist/vapours/spray. |
| P305+P351+P3 | 338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, present and easy to do. Continue rinsing. |
| P310 | Immediately call a POISON CENTER/doctor. |
| P321 | Specific treatment (see on this label). |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |
| P501 | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| 2.3 Other hazar | |
| The product do formaldehydes. | pes not contain any organic halogen compounds (AOX), nitrates, heavy metal compounds o |

SECTION 3: Composition/information on ingredients

· 3.2 Chemical characterisation: Mixtures

• **Description:** Mixture of substances listed below with nonhazardous additions.

| · Dangerous components: | | | | |
|-------------------------|--|-------|--|--|
| | Hydrochloric Acid | 10.0% | | |
| EINECS: 231-595-7 | Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; STOT SE 3, H335 | | | |
| · Additional Components | | | | |
| CAS: 7440-57-5 | Gold | 0.1% | | |
| CAS: 7732-18-5 | Water | 89.9% | | |
| EINECS: 231-791-2 | | | | |
| · Additional informati | on: 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: Immediately remove any clothing soiled by the product.

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- *After inhalation:* In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- · After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.
- After swallowing: Rinse out mouth and then drink plenty of water.
- 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.

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 Wear protective equipment. Keep unprotected persons away.
- 6.2 Environmental precautions: Inform respective authorities in case of seepage into water course or sewage system. Do not allow to enter sewers/ surface or ground water.
- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Use neutralising agent. Dispose contaminated material as waste according to item 13. Ensure adequate ventilation.
 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

- Ensure good ventilation/exhaustion at the workplace.
- Prevent formation of aerosols.
- 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: Keep container tightly sealed.

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· 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/m³, 5 ppm Long-term value: 2 mg/m³, 1 ppm (gas and aerosol mists)

• Additional information: The lists valid during the making were used as basis.

· 8.2 Exposure controls

- · Personal protective equipment:
- General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing Wash hands before breaks and at the end of work. Avoid contact with the skin. Avoid contact with the eyes and skin.

• Respiratory protection:

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

• Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

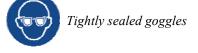
• Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

• Penetration time of glove material The exact break trough time has to be found out by

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

• Eye protection:





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| 9.1 Information on basic physical and ch | hemical properties |
|--|---|
| General Information | |
| Appearance: | |
| Form: | Liquid |
| Colour: | Transparent |
| Odour: | Characteristic |
| Odour threshold: | Not determined. |
| pH-value at 20 °C: | <4 |
| Change in condition | |
| Melting point/freezing point: | 0 °C |
| Initial boiling point and boiling range: | - 100 °C |
| Flash point: | Not applicable. |
| Flammability (solid, gas): | Not applicable. |
| Decomposition temperature: | Not determined. |
| Auto-ignition temperature: | Product is not selfigniting. |
| Explosive properties: | Product does not present an explosion hazard. |
| | Not determined. |
| Explosion limits: | |
| Lower: | Not determined. |
| Upper: | Not determined. |
| Vapour pressure at 20 °C: | 23 hPa |
| Density at 20 °C: | $l g/cm^3$ |
| Relative density | Not determined. |
| Vapour density | Not determined. |
| Evaporation rate | Not determined. |
| Solubility in / Miscibility with | |
| water: | Not miscible or difficult to mix. |
| Partition coefficient: n-octanol/water: | Not determined. |
| Viscosity: | |
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| Solvent content: | |
| Water: | <i>89.9 %</i> |
| 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.

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· 10.3 Possibility of hazardous reactions

Reacts with various metals.

Violent reactions with strong alkalis and oxidising agents.

- \cdot 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: Alkaline metals and Powdered metals

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

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
- Causes skin irritation.
- · Serious eye damage/irritation
- Causes serious eye damage.
- · Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- · CMR effects (carcinogenity, 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
- May cause respiratory irritation.
- · 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:
- Not hazardous for water.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

- · 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

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

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according to 1907/2006/EC, Article 31

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· Uncleaned packaging:

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• Recommendation: Disposal must be made according to official regulations.

| · 14.1 UN-Number · ADR, IMDG, IATA | UN1789 |
|---|---|
| · 14.2 UN proper shipping name | 6111/02 |
| ADR | 1789 HYDROCHLORIC ACID mixture |
| · IMDG, IATA | HYDROCHLORIC ACID mixture |
| · 14.3 Transport hazard class(es) | |
| ADR | |
| | |
| | |
| | |
| · Class | 8 (C1) Corrosive substances. |
| · Label | 8 |
| · IMDG, IATA | |
| · Class | 8 Corrosive substances. |
| · Label | 8 |
| · 14.4 Packing group | |
| ADR, IMDG, IATA | II |
| 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| 14.6 Special precautions for user | Warning: Corrosive substances. |
| Danger code (Kemler): | 80 E. 4 G. D. |
| EMS Number: | F-A,S-B Strong goide |
| · Segregation groups · Stowage Category | Strong acids C |
| | |
| • 14.7 Transport in bulk according to Anne Marpol and the IBC Code | <i>x II of</i> Not applicable. |
| • | |
| Transport/Additional information: | |
| ADR | 17 |
| Limited quantities (LQ) | |
| \cdot Excepted quantities (EQ) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml |



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|----------------------------------|--|
| Transport category | 2 |
| • Tunnel restriction code | E |
| ·IMDG | |
| · Limited quantities (LQ) | 1L |
| \cdot Excepted quantities (EQ) | Code: E2 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 500 ml |
| · UN "Model Regulation": | UN 1789 HYDROCHLORIC ACID MIXTURE, 8, II |

SECTION 15: Regulatory information

 \cdot 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

| CAS: 7732-18-5 | Water | 89.9% |
|-------------------|---|-------|
| EINECS: 231-791-2 | | |
| | Hydrochloric Acid | 10.0% |
| EINECS: 231-595-7 | Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; STOT SE 3, H335 | |
| CAS: 7440-57-5 | Gold | 0.1% |

· Directive 2012/18/EU

• Named dangerous substances - ANNEX I None of the ingredients is listed.

• REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3

· National regulations:

· Information about limitation of use:

Workers are not allowed to be exposed to this hazardous material. Exceptions can be made by the authorities in certain cases.

• Waterhazard class: Generally not hazardous for water.

• 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Disclaimer

The information provided in this Material Safety Data Sheet is based on our present knowledge, and believed to be correct at the date of publication. However, no representation is made concerning its accuracy and completeness. It is intended as guidance only, and is not to be considered a warranty or quality specification. All materials may present unknown hazards, and should be used with caution. Although certain hazards are described, we cannot guarantee that these are the only hazards which exist. PerkinElmer Life and Analytical Sciences shall not be held liable for any damage resulting from handling or from contact with the product.

· Relevant phrases

H302 Harmful if swallowed. H314 Causes severe skin burns and eye damage. H318 Causes serious eye damage. H335 May cause respiratory irritation.

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(Contd. of page 8) • Department issuing SDS: Environmental, Health and Safety PerkinElmer Chalfont Road **Buckinghamshire** Seer Green HP9 2FX United Kingdom Telephone : 0800-89 60 46 FAX: 0800-89 17 14 · Contact: Within the USA: 1-(800)-762-4000 Outside the USA: 1-(203)-712-8488 · Abbreviations and acronyms RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail) ICAO: International Civil Aviation Organisation 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) 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 Skin Irrit. 2: Skin corrosion/irritation - Category 2 Eye Dam. 1: Serious eye damage/eye irritation – Category 1 STOT SE 3: Specific target organ toxicity (single exposure) – Category 3 • * Data compared to the previous version altered.