1 Identification of the substance/mixture and of the company/undertaking

- Informations to product No. 4178
- Product name: Chlorhexidindigluconat-Lösung (wässrig, 20%), API
- Supplier of the Product / responsible Company: Caesar & Loretz GmbH, Herderstr. 31, 40721 Hilden, Tel.: 02103/4994-0, Fax: 02103/32360, e-mail: info@caelo.de
- Emergency telephone: Giftinformationszentrum Mainz, Langenbeckstr. 1, 55131 Mainz, Tel.: 06131/19240
- Relevant identified uses of the substance or mixture and uses advised against: No further relevant information available.
- Application of the substance / mixture: Ingredient for pharmaceutical drugs or active pharmaceutical ingredient.

2 Hazards identification

- GHS-Labelling Elements:

  - Signal word: Danger
  - H-Phrases: H318 Causes serious eye damage. H400 Very toxic to aquatic life.
  - P-Phrases: P261 Avoid breathing dust/fume/gas/mist/vapours/spray P281 Use personal protective equipment as required P305 IF IN EYES: P351 Rinse continuously with water for several minutes

Eye Dam. 1
Aquatic Acute 1
3 Composition / information on ingredients

- **Chemical characterization:** Solution of chlorhexidine digluconate in water.
- **CAS-No. Substance name:** 18472-51-0 Chlorhexidine digluconate (20%)
- **EINECS-No.:** 242-354-0
- **REACH Reg. No.:** 01-2119946568-22-0000
- **INCI-Name:** Chlorhexidine Digluconate

**CAS-No. Substance name**
7732-18-5 Water (80%)
- **EINECS-No.:** 231-791-2
- **REACH Reg. No.:** Exempted from the obligation to register according to Annex 4 / 5 REACH-regulation.
- **INCI-Name:** Aqua

4 First aid measures

- **after inhalation:** Fresh air. If feeling unwell seek medical advice.
- **after skin contact:** Remove contaminated clothing. Wash off with water.
- **After eye contact:** Rinse out with plenty of water with the eyelid wide open. Call in ophthalmologist if irritation continues.
- **after swallowing:** Rinse mouth, drink plenty of water. Seek medical advice.

5 Fire-fighting measures

- **Suitable extinguishing media:** All regular extinguishing media can be used. Select fire fighting measures suitable to surrounding environment.
- **Specific hazards during fire fighting:** Combustible but not flammable. In case of fire dangerous gases / vapours can be released: Smoke gases, organic chlorine compounds.
- **Special protective equipment for fire-fighters:** Suitable protective clothes and respiratory protection.
- **Additional information:** Prevent fire extinguishing water from contaminating surface water, the ground water system or soil. Residues must be deposited according to local regulations.

6 Accidental release measures

- **Personal protective measures:** Avoid contact with substance.
- **Environmental protective measures:** Prevent from entering into drains.
- **Methods for cleaning:** Absorb with liquid-binding material: Sand, silica gel, acid binder, universal binder, saw dust. Disposal according to Chapter 13 of this MSDS. Clean up with water.
7 Handling and storage

- **Handling**: The usual precaution measures during handling of chemicals are to observe.
- **Informations to fire or explosion protection**: No special measures required.
- **Storage**: Tightly closed. Store at a dry place. At room temperature ( +15°C to +25°C ). Do not freeze.

8 Exposure controls / personal protective equipment

**Components with limit values that require monitoring at the workplace:**
The product does not contain relevant quantities of substances with limit values that require monitoring at the workplace.

- **Personal protective equipment:**

**General protective and hygiene measures:**
Keep away from food, beverages and animal food.
Wash hands before breaks and after work.
Berührung mit den Augen vermeiden.
- **Respiratory protection**: not required.
- **Hand protection**: Protection gloves of latex or rubber
- **Eye protection**: Safety glasses.

9 Physical and chemical properties

- **Form**: liquid
- **Colour**: clear
- **Odour**: odourless
- **Melting point / melting range**: not determined
- **Boiling point / boiling range**: 105 °C
- **Flash point**: not determined
- **Density**: (20 °C) 1,065 g/cm³
- **Viscosity**: 1,47 cSt
- **pH-range**: 5,5 - 7,0
- **Solubility in water**: readily soluble
- **Ethanol**: 21 g/l
- **Isopropanol**: 35 g/l
- **Aceton**: 44 g/l

10 Stability and reactivity

- **Thermical decomposition / conditions to avoid:**
Protect from heat, fire and direct sunlight.
- **Hazardous reactions**: protect from strong oxidants.
- **Hazardous decomposition products**: In case of fire dangerous vapours/gases can be generated.
11 Toxicological information

- **Acute toxicity:**
  LD50 (oral, rat): 2000 mg / kg.
- **Swallowing:** Ingestion may cause irritation of the gastrointestinal tract.
- **Skin contact:** Mean lethal dose dermal (rabbit)> 2000mg/kg. Repeated and / or prolonged skin contact may lead to dermatitis.
- **Eye contact:** strong irritant
- **Skin corrosion:** No evidence of irritant effects from normal handling and use
- **Eye injuries:** Severe irritation of the eye
- **Respiratory / Skin:** Rare allergic directorates. No sensitizing properties known.
- **Mutagenicity:** There is no evidence of mutagenic potential.
- **Carcinogenicity:** There is no evidence that this product is carcinogene under normal conditions of handling and use.
- **Reproductive toxicity:** no evidence
- **Specific target organ toxicity single exposure:** may irritate the respiratory tract
- **Aspiration:** no aspiration toxicity

12 Ecological information

- **Aquatic toxicity:**
  Acute toxicity (Fish): 2,08mg/l
  Acute toxicity (Daphnia magna): 0,087 mg/l
  Acute toxicity (Algae): 0,081 mg/l
- **Biodegradation:** 70% (10d): Readily biodegradable.
- **logPOW:** <4
- **Remark:** Do not allow to enter surface and ground water, waste water or soil. Biocide, toxic for microorganisms.
  - **Water hazard class:** 3 (VwVwS): very hazardous for water.

13 Disposal considerations

- **Recommendation:** Disposal according to local regulations as pharmaceutical waste.
- **Empty contaminated packaging:**
  - **Recommendation:** Disposal according to the local regulations.

14 Transport information

- **Land transport according to ADR:**
  - **Substance name:** Environmentally hazardous liquid,n.o.s., Chlorhexidindigluconatlösung 20%
  - **Class:** 9
  - **UN-number:** 3082
  - **Packing group:** III
  - **Classification code:** M6
  - **Limited quantities (Table 3.4 ADR):** 5 l
  - **Hazard classification number:** 90
  - **Special provisions (Chapter 3.3 ADR):** 274
  - **Additional informations for sea transport IMDG:**
· EMS-No.: F-A, S-F
· Properties: m.p.

15 Regulatory information

· Labelling according to actual legislation (GHS, *Globally Harmonized System of Classification and Labelling of Chemicals*): The product is classified and labelled according to GHS-regulations.
  · Hazard symbols: GHS05, GHS09
  · Signal word: Danger
  · H-Phrases:
    H318 Causes serious eye damage.
    H400 Very toxic to aquatic life.
  · P-Phrases:
    P261 Avoid breathing dust/fume/gas/mist/vapours/spray
    P281 Use personal protective equipment as required
    P305 IF IN EYES:
    P351 Rinse continuously with water for several minutes
  · National regulations (Germany):
  · Water hazard class: see chapter 12
  · Storage class TRGS 510: 8B
  · VbF class: -

16 Other Information

The information provided in this MSDS is correct to the best of our knowledge at the date of edition.

· Reason for last revision: Adjustment to regulation (EC) 1907/2006 (REACH) and GHS-labelling system.