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

· **Informations to product No. 2180**

· **Product name:**

Chloralhydrat

Chlorali hydras

Chloral hydrate

· **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-Labeling Elements:**



· **Signal word:** Danger

· **H-Phrases:**

H301 Toxic if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

· **P-Phrases:**

P262 Do not get in eyes, on skin, or on clothing

P264 Wash thoroughly after handling

P270 Do not eat, drink or smoke when using this product


P280 Wear protective gloves/protective clothing/eye protection/face protection

P301 IF SWALLOWED:

P310 Immediately call a POISON CENTER or doctor/physician

P405 Store locked up

P501 Dispose of contents/container to dangerous Waste

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Acute Tox. 3
Eye Irrit. 2
Skin Irrit. 2

3 Composition / information on ingredients

• **Chemical characterization:**

CAS-No. Substance name

302-17-0 Chloral hydrate

• **EINECS-No.:** 206-117-5

• **Index-No.:** 605-014-00-6

• **REACH Reg. No.:** 01-2120117773-57-0000

• **INCI-Name:** -

4 First aid measures


- **after inhalation:** Bring the person out of the contaminated area to fresh air, Seek medical help immediately. Show product-label or this MSDS.
- **after skin contact:** Take off contaminated clothes and shoes, wash immediately with plenty of water and soap.
- **after eye contact:** Rinse out with plenty of water with the eyelid wide open , seek medical advice, even if no immediate symptoms are observed.
- **after swallowing:** Drink plenty of water. Induce vomiting. Seek medical advice immediately. Atemwege freihalten.
- **Medical advice:** Laxans: Sodium sulfate (1big spoon / 1/4l Water). Activated coal. No gastric lavage.

5 Fire-fighting measures

- **Suitable extinguishing media:** Not combustible. All regular extinguishing media can be used. Select fire fighting measures suitable to environment
- **Specific hazards during fire fighting:** In case of fire dangerous vapours/gases can be generated: Hydrogen chloride, phosgene.
- **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. Avoid dust formation.
- **Environmental protective measures:** Prevent from entering into surface water, the ground water system or soil.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.

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7 Handling and storage

- **Handling:**
- **Advice on safe handling:** No special measures required.
- **Storage:**
- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place. At room temperature (+15°C to +25°C). Store at a good ventilated place.

8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **Personal protective equipment:**
- **General protective and hygiene measures:** The usual precaution measures during handling of chemicals are to observe.
- **Respiratory protection:** Dust protection mask.
- **Hand protection:** Gloves of rubber or PVZ, for contact 15 minutes maximum: Neoprene. Suitable protection gloves for longer contact: Material: Nitrile rubber/nitrile latex Breakthrough time > 480 min., thickness: 0,35 mm.
- **Eye protection:** Safety glasses

9 Physical and chemical properties


- **Form:** solid
- **Colour:** white
- **Odour:** pungent odour
- **Melting point / melting range:** 52 °C
- **Boiling point / boiling range:** 96 °C
- **Flash point:** not applicable
- **Decomposition temperature:** > 97 °C
- **Vapour pressure:** (20 °C) 13 hPa
- **Density:** (20 °C) 1,91 g/cm³
- **Solubility in / Miscibility with**
- **Water:** (20 °C) 6600 g/l
- **pH-range:** (100 g/l, 20 °C) 3,5 - 5,5

10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** Thermal decomposition above 97 °C. Extremely soluble in Water.
- **Hazardous decomposition products:** On dehydration volatile chloral is generated
- **Additional information:** Avoid contact with: Plastic, iron, iron compounds

11 Toxicological information

- **Acute toxicity:**
- LD/LD50-data relevant for hazard classification:**
- Oral: LD50: 479 mg/kg (rat)
- Dermal: LD50: 3030 mg/kg (rat)
- Oral: LDLo: 4 mg/kg (Mensch)

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- **Primary irritant effect:**
- **on skin:** Strong Irritations.
- **on eyes:** Strong Irritations.
- **on respiratory organs:** Irritations of mucous membranes, coughing respiratory insufficiency.
- **after swallowing:** Irritations of mucous membranes in mouth, throat and gastrointestinal tract.
- **Sub-acute / chronic toxicity:**
Inhalation can cause oedemes in respiratory tract. After resorption of toxic quantities: central nervous disorder, cardiovascular disorder (Illness, Vomiting, Drop in blood pressure, fatigue, consciousness, respiratory paralysis).
- **Additional toxicological informations:** Toxic effect on liver, kidneys, heart.

12 Ecological information


- **Aquatic toxicity:**
Fishes: LC50 *Leuciscus idus*: 1.720 mg/l; 48 h
Daphnia: EC50 *Daphnia magna*: 510 mg/l; 24 h
EC0 *Entosiphon sulcatum*: 79 mg/l; 72 h
Algae: IC50 *Scenedesmus quadricauda*: 2,8 mg/l; 7 d
Bacteria: EC50 *Pseudomonas putida*: 1,6 mg/l; 16 h
- **log p(O/W):** 0,99
- **General advices:** Prevent from leaking into ground water, environment waters or drainage.
- **Water hazard class:** 2 (VwVwS): hazardous for water.

13 Disposal considerations

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

14 Transport informations

- **Land transport according to ADR:**
- **Proper shipping name:** Toxic solids, organic, n.o.s., Chloral hydrate
- **Class:** 6.1
- **UN-number:** 2811
- **Packing group:** III
- **Classification code:** T2
- **Limited quantities (Table 3.4.6. ADR):** 5 kg
- **Hazard classification number:** 60
- **Special provisions (Chapter 3.3 ADR):** -
- **Additional informations for sea transport IMDG:**
- **EMS-No.:** F-A, S-A
- **Properties:** -

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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:** GHS06, GHS07

• **Signal word:** Danger

• **H-Phrases:**

H301 Toxic if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

• **P-Phrases:**

P262 Do not get in eyes, on skin, or on clothing

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P405 Store locked up

P501 Dispose of contents/container to dangerous Waste

• **National regulations (Germany):**

• **Water hazard class:** see chapter 12

• **Storage class TRGS 510:** 6.1C

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.