


Page 1 of 5 Print Date 21.01.2019	Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Theophyllin-Ethylendiamin-Hydrat, API	 Revision Date 21.01.2019
--	---	---

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

· **Informations to product No. 2691**

· **Product name:**

Theophyllin-Ethylendiamin-Hydrat, API Theophyllinum et ethylendiaminum hydricum

· **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.

· **P-Phrases:**

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

P301 IF SWALLOWED:

P310 Immediately call a POISON CENTER or doctor/physician

Acute Tox. 3


3 Composition / information on ingredients

CAS-No. Substance name

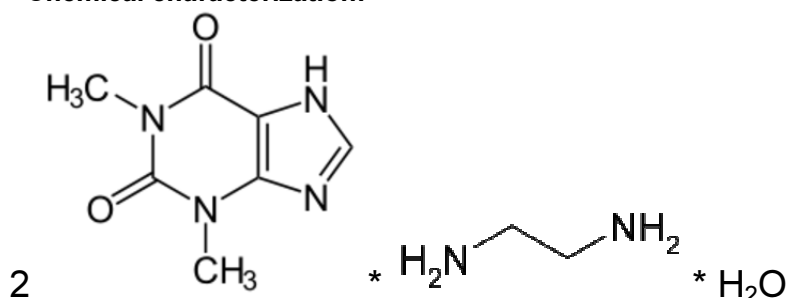
317-34-0 Theophyllin-Ethylendiamin-Hydrat

· **EINECS-No.:** 206-264-5

· **REACH Reg. No.:** (pre-registered)

<p>Page 2 of 5</p> <p>Print Date 21.01.2019</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Theophyllin-Ethylendiamin-Hydrat, API</p>	 <p>Revision Date 21.01.2019</p>
---	--	---

- **INCI-Name:** -
- **Chemical characterization:**



Hydrated complex of theophylline and ethylene diamine in molecular ratio 2 : 1

4 First aid measures

- **after inhalation:** Fresh air. Seek medical advice.
- **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.
- **after swallowing:** Seek medical advice immediately

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. In case of fire dangerous vapours/gases can be generated: Nitrogen oxides.
- **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 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.

7 Handling and storage

- **Handling:** No special requirements.
- **Advice on safe handling:** Ensure good ventilation/exhaustion at the workplace. Handling corresponding to laboratory safety guidelines.
- **Informations to fire or explosion protection:** No special measures required.
- **Storage:**

<p>Page 3 of 5</p> <p>Print Date 21.01.2019</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Theophyllin-Ethylendiamin-Hydrat, API</p>	 <p>Revision Date 21.01.2019</p>
---	--	---

- **Requirements for storage areas and containers:** Tightly closed. Store at a dry place.
- **Advices on common storage:** Not required.

8 Exposure controls / personal protective equipment

- **Personal protective equipment:**
- **General protective and hygiene measures:**
Keep away from food, beverages and animal food.
Wash hands before breaks and after work.
- **Respiratory protection:** Dust protection mask.
- **Hand protection:** Protection gloves of rubber or latex
- **Eye protection:** Safety glasses

9 Physical and chemical properties


- **Form:** solid
- **Colour:** white – light yellow
- **Odour:** nearly odourless
- **Melting point / melting range:** 270 - 274 °C
- **Boiling point / boiling range:** not determined
- **Flash point:** not determined
- **Flammability (solid, vapours):** The product is not flammable.
- **Decomposition temperature:** > 273 °C
- **Density:** Bulk density: 380 kg/m³
- **Solubility in / Miscibility with**
- **Water:** (23 °C) 200 g/l

10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** Avoid strong heating.
- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** None.

11 Toxicological information

- **Acute toxicity:**
- LD/LD50-data relevant for hazard classification:**
LD50 Rat (oral): 247 mg/kg
LC50 Rat (inhalativ): > 5,3 mg/l 4 h
LD50 Rat (dermal): > 2.000 mg/kg
LC50 Mouse (intraperitoneal): ca. 218 mg/kg
- Primary irritant effect:**
Skin irritation (rabbit): Irritant
Serious eye damage rabbit: Irreversible damage.
- Sensitizing effect:**
Sensitizing effect possible.

<p>Page 4 of 5</p> <p>Print Date 21.01.2019</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Theophyllin-Ethylendiamin-Hydrat, API</p>	 <p>Revision Date 21.01.2019</p>
---	--	---

12 Ecological information

- **Aquatic toxicity:**

Fish: LC50 (96 h) > 100 < 220 mg/l

Aquatic invertebrates: EC50 (48 h) > 10 < 100 mg/l.

Water plants: EC50 (72 h) > 100 mg/l, EC20 (0,5 h) > 100 mg/l

Microorganisms/sludge: EC20 (0,5 h) > 100 mg/l

Harmful for water organisms

- **Persistence and degradability**

Not readily biodegradable: >60%.

- **Log pOW:** -0,28

Bioaccumulation in organisms is not likely.

- **Water hazard class:** 1 (VwVwS): slightly 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., Theophyllin

• **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):** 274, 614

• **Additional informations for sea transport IMDG:**

• **EMS-No.:** F-A, S-A

• **Properties:** -

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

• **Signal word:** Danger

• **H-Phrases:**


H301 Toxic if swallowed.

• **P-Phrases:**

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

P301 IF SWALLOWED:

P310 Immediately call a POISON CENTER or doctor/physician

<p>Page 5 of 5</p> <p>Print Date 21.01.2019</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Theophyllin-Ethylendiamin-Hydrat, API</p>	 <p>Revision Date 21.01.2019</p>
---	--	---

- **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.