


<p>Page 1 of 5</p> <p>Print Date 21.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Minoxidil, API</p>	 <p>Revision Date 21.11.2018</p>
-------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

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

- **Informations to product No. 5310**
- **Product name:**

Minoxidil, API **Minoxidilum**

- **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:** Warning

- **H-Phrases:**

H302 Harmful if swallowed
H315 Causes skin irritation
H319 Causes serious eye irritation
H335 May cause respiratory irritation

- **P-Phrases:**


P280 Wear protective gloves/protective clothing/eye protection/face protection
P305 IF IN EYES
P351 Rinse continuously with water for several minutes

Acute Tox, oral: 4

Skin Irrit.: 2

Eye Irrit.: 2

STOT SE: 3

<p>Page 2 of 5</p> <p>Print Date 21.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Minoxidil, API</p>	 <p>Revision Date 21.11.2018</p>
-------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

3 Composition / information on ingredients

· **Chemical characterization:**

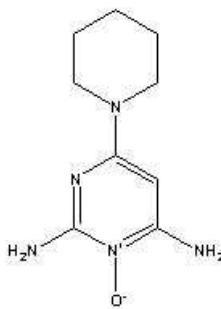
CAS-No. Substance name

38304-91-5 Minoxidil

· **EINECS-No.:** 258-874-2

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

· **INCI-Name:** Pyrrolidinyl Diaminopyrimidine Oxide



4 First aid measures


- **after inhalation:** Fresh air, If feeling unwell 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:** Drink water. Induce vomiting. 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.
- **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 dust formation and contact with substance.
- **Environmental protective measures:** Prevent from entering into drains.
- **Methods for cleaning:** Take up dry. Disposal according to Chapter 13 of this MSDS. Clean up with water.

<p>Page 3 of 5</p> <p>Print Date 21.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Minoxidil, API</p>	 <p>Revision Date 21.11.2018</p>
-------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

7 Handling and storage

- **Handling:** No special requirements.
- **Advice on safe handling:** No special measures required.
- **Informations to fire or explosion protection:** 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). Vor Licht, Feuchtigkeit und Wärme schützen.
- **Advices on common storage:** Not required.

8 Exposure controls / 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:** Protection gloves of latex or rubber.
- **Eye protection:** Safety glasses

9 Physical and chemical properties


- **Form:** solid
 - **Colour:** white
 - **Odour:** Odourless.
 - **Melting point / melting range:** 265 - 275 °C
 - **Boiling point / boiling range:** not determined
 - **Flash point:** not determined
 - **Explosion hazard:** Dust explosion hazard.
 - **Density:** not determined
- Bulk density: ca. 700 kg/cbm
- **Solubility in / Miscibility with**
 - **Water:** (20 °C) 2 g/l
 - **Additional information:** Soluble in Ethanol

10 Stability and reactivity

- **Thermal decomposition / conditions to avoid:** No decomposition during appropriate use.
- **Materials to avoid:** Strong oxidizers
- **Hazardous reactions:** No hazardous reactions known.
- **Hazardous decomposition products:** In case of fire: nitrogen oxides.

11 Toxicological information

- **Acute toxicity:**
- LD/LD50-data relevant for hazard classification:**
LD50(oral,Rat): 1321 mg/kg
LD50(oral,Mouse): 1000 mg/kg

Page 4 of 5 Print Date 21.11.2018	Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH) Minoxidil, API	 Revision Date 21.11.2018
------------------------------------------	------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------

LD50(i.v.,Rat): 49 mg/kg

LDL0(Mensch): 69 mg/kg

TDL0(Mensch): 107 mcg/kg

• **Other information (experimental toxicology):**

Antihypertensive effect.

Side effect: stimulation of hair growth (Br. Med. J. 287, 1015 (1983)).

12 Ecological information

• **Ecotoxic effects:**

Quantitative ecotoxicological data for this product are not available.

• **Water hazard class:** 1 (self classification): 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:**

Not classified as dangerous in the meaning of transport regulations.

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:** GHS07

• **Signal word:** Warning

• **H-Phrases:**

H302 Harmful if swallowed

H315 Causes skin irritation

H319 Causes serious eye irritation

H335 May cause respiratory irritation

• **P-Phrases:**

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


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:** 11

<p>Page 5 of 5</p> <p>Print Date 21.11.2018</p>	<p>Material Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)</p> <p>Minoxidil, API</p>	 <p>Revision Date 21.11.2018</p>
-------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------

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.