

Estradiol Glow

Revision date: 23 Aug 2023 Version: 1 Print date: 23 Aug 2023

**Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)****SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1. Product identifier**

Trade name/designation:

Estradiol Glow

Article No.:

PR-958

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture:

laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals

1.3. Details of the supplier of the safety data sheet**Supplier (manufacturer/importer/only representative/downstream user/distributor):****Jena Bioscience GmbH**

Löbstedter Straße 71

07749 Jena

Germany

Telephone: 0049-3641-6285000**E-mail:** info@jenabioscience.com**Website:** www.jenabioscience.com**1.4. Emergency telephone number**

No data available

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Carcinogenicity (<i>Carc. 2</i>)	H351: Suspected of causing cancer.	Calculation method.
Reproductive toxicity (<i>Repr. 1A</i>)	H360: May damage fertility or the unborn child.	Calculation method.
Reproductive toxicity (<i>Lact.</i>)	H362: May cause harm to breast-fed children.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Acute 1</i>)	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Chronic 1</i>)	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms:

**GHS08**
Health hazard**GHS09**
Environment

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Signal word: Danger**Hazard statements for health hazards**

H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.

Hazard statements for environmental hazards

H410	Very toxic to aquatic life with long lasting effects.
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Supplemental hazard information: none**Precautionary statements Prevention**

P263	Avoid contact during pregnancy and while nursing.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection/....

Precautionary statements Response

P308 + P313	IF exposed or concerned: Get medical advice/attention.
P391	Collect spillage.

Special rules for supplemental label elements for certain mixtures:



95,0 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (dermal).

95,0 % percent of the mixture consists of ingredient(s) of unknown acute toxicity (inhalative).

2.3. Other hazards

No data available

SECTION 3: Composition/information on ingredients**3.2. Mixtures****Hazardous ingredients / Hazardous impurities / Stabilisers:**

Product identifiers	Substance name Classification according to Regulation (EC) No 1272/2008 [CLP]	Concentration
CAS No.: 50-28-2 EC No.: 200-023-8	estradiol Aquatic Acute 1 (H400), Aquatic Chronic 1 (H410), Carc. 2 (H351), Lact. (H362), Repr. 1A (H360)   Danger M-factor (acute): 1 M-factor (chronic): 10,000	57 - < 100 weight-%

Full text of H- and EUH-phrases: see section 16.

SECTION 4: First aid measures**4.1. Description of first aid measures****General information:**

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible). Remove victim out of the danger area. Remove contaminated, saturated clothing. If unconscious but breathing normally, place in recovery position and seek medical advice. Do not leave affected person unattended. Warning First aider: Pay attention to self-protection!

Following inhalation:

Provide fresh air. Get medical advice/attention if you feel unwell.

In case of skin contact:

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing.

Following ingestion:

Rinse mouth. Let 1 glass of water be drunken in little sips (dilution effect). Get medical advice/attention if you feel unwell.

Self-protection of the first aider:

First aider: Pay attention to self-protection! Use personal protection equipment. No direct artificial respiration to be given by first aider.

4.2. Most important symptoms and effects, both acute and delayed

No data available

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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Co-ordinate fire-fighting measures to the fire surroundings.

5.2. Special hazards arising from the substance or mixture

The product itself does not burn.

Hazardous combustion products:

In case of fire: Gases/vapours, toxic

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing.

5.4. Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Personal precautions:

Remove persons to safety.

Protective equipment:

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

6.1.2. For emergency responders

Personal protection equipment:

Personal protection equipment: see section 8

6.2. Environmental precautions

Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up

For containment:

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

6.5. Additional information

Use appropriate container to avoid environmental contamination.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures

Advices on safe handling:

Wear personal protection equipment (refer to section 8). Avoid contact during pregnancy/while nursing.

Fire prevent measures:

No special measures are necessary.

Advices on general occupational hygiene

When using do not eat, drink, smoke, sniff. Avoid contact with skin, eyes and clothes.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions:

Keep container tightly closed in a cool, well-ventilated place.

7.3. Specific end use(s)

No data available

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SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No data available

8.2. Exposure controls

8.2.1. Appropriate engineering controls

No data available

8.2.2. Personal protection equipment

Eye/face protection:

Eye glasses with side protection EN 166

Skin protection:

Tested protective gloves must be worn EN ISO 374 Suitable material: Breakthrough time: min In the case of wanting to use the gloves again, clean them before taking off and air them well. Breakthrough times and swelling properties of the material must be taken into consideration.

8.2.3. Environmental exposure controls

No data available

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance

Physical state: Liquid

Colour: not determined

Odour: not determined

9.2. Other information

No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product itself does not burn.

10.2. Chemical stability

No data available

10.3. Possibility of hazardous reactions

No data available

10.4. Conditions to avoid

No data available

10.5. Incompatible materials

No data available

10.6. Hazardous decomposition products

In case of fire: Gases/vapours, toxic

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

estradiol CAS No.: 50-28-2 EC No.: 200-023-8

LD₅₀ oral: >2,000 mg/kg (rat) OECD Guideline 423 (Acute Oral toxicity - Acute Toxic Class Method)

Acute oral toxicity:

Based on available data, the classification criteria are not met.

Acute dermal toxicity:

Based on available data, the classification criteria are not met.

Acute inhalation toxicity:

Based on available data, the classification criteria are not met.

Skin corrosion/irritation:

Based on available data, the classification criteria are not met.

Serious eye damage/irritation:

Based on available data, the classification criteria are not met.

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Respiratory or skin sensitisation:

Based on available data, the classification criteria are not met.

Germ cell mutagenicity:

Based on available data, the classification criteria are not met.

Carcinogenicity:

Suspected of causing cancer.

Reproductive toxicity:

May damage fertility or the unborn child. May cause harm to breast-fed children.

STOT-single exposure:

Based on available data, the classification criteria are not met.

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.

Additional information:

No data available

11.2. Information on other hazards

No data available

SECTION 12: Ecological information

12.1. Toxicity

estradiol CAS No.: 50-28-2 EC No.: 200-023-8

EC₅₀ : >2.48 mg/L 3 d (Algae/water plant, <i>Desmodesmus subspicatus</i> (previous name: <i>Scenedesmus subspicatus</i>)) OECD Guideline 201 (Alga, Growth Inhibition Test)

NOEC : ≥0.1387 mg/L 21 d (crustaceans, <i>Daphnia magna</i>) OECD 202: "Daphnia sp., Acute immobilisation test and reproduction test". Part I and II. Adopted 04 Apr. 1984, OECD, Paris, 1993

Aquatic toxicity:

Very toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

estradiol CAS No.: 50-28-2 EC No.: 200-023-8

Log K_{ow} : 3.942

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

estradiol CAS No.: 50-28-2 EC No.: 200-023-8

Results of PBT and vPvB assessment: —
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12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

No data available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment options


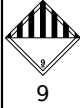
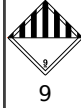
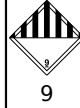




Appropriate disposal / Product:

Consult the appropriate local waste disposal expert about waste disposal.

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SECTION 14: Transport information

Land transport (ADR/RID)	Inland waterway craft (ADN)	Sea transport (IMDG)	Air transport (ICAO-TI / IATA-DGR)
14.1. UN number or ID number			
UN 3082	UN 3082	UN 3082	UN 3082
14.2. UN proper shipping name			
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (estradiol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (estradiol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (estradiol)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (estradiol)
14.3. Transport hazard class(es)			
 9	 9	 9	 9
14.4. Packing group			
III	III	III	III
14.5. Environmental hazards			
		 MARINE POLLUTANT	
14.6. Special precautions for user			
Special Provisions: 274 335 375 601 Limited quantity (LQ): 5 L Excepted Quantities (EQ): E1 Hazard identification number (Kemler No.): 90 Classification code: M6 Tunnel restriction code: (-)	Special Provisions: 274 335 375 601 Limited quantity (LQ): 5 L Excepted Quantities (EQ): E1 Classification code: M6	Special Provisions: 274 335 969 Limited quantity (LQ): 5 L Excepted Quantities (EQ): E1 EmS-No.: F-A, S-F	Special Provisions: A97 A158 A197 A215 Limited quantity (LQ): Y964 Excepted Quantities (EQ): E1

14.7. Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.1. EU legislation**

No data available

15.1.2. National regulations [DE] National regulations**Water hazard class****WGK:**

3 - highly hazardous to water

15.2. Chemical Safety Assessment

No data available

SECTION 16: Other information**16.1. Indication of changes**

No data available

16.2. Abbreviations and acronyms

No data available

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16.3. Key literature references and sources for data

Substance name	Type	source of supply
estradiol CAS No.: 50-28-2 EC No.: 200-023-8	Classification of the substance or mixture; LD ₅₀ oral; EC ₅₀ ; NOEC	Source: European Chemicals Agency, http://echa.europa.eu/

16.4. Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008 [CLP]

Hazard classes and hazard categories	Hazard statements	Classification procedure
Carcinogenicity (<i>Carc. 2</i>)	H351: Suspected of causing cancer.	Calculation method.
Reproductive toxicity (<i>Repr. 1A</i>)	H360: May damage fertility or the unborn child.	Calculation method.
Reproductive toxicity (<i>Lact.</i>)	H362: May cause harm to breast-fed children.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Acute 1</i>)	H400: Very toxic to aquatic life.	Calculation method.
Hazardous to the aquatic environment (<i>Aquatic Chronic 1</i>)	H410: Very toxic to aquatic life with long lasting effects.	Calculation method.

16.5. Relevant R-, H- and EUH-phrases (Number and full text)

Hazard statements	
H351	Suspected of causing cancer.
H360	May damage fertility or the unborn child.
H362	May cause harm to breast-fed children.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

16.6. Training advice

No data available

16.7. Additional information

No data available