Safety Data Sheet

Cat. # 786-1061

Eosin Y Solution (.5%) alcoholic

Size: 1Gallon
SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier
Product form: Mixture
Product name: Eosin Y Solution
Product code: 130E_131E
Product group: Trade product

1.2. Relevant identified uses of the substance or mixture and uses advised against
1.2.1. Relevant identified uses
No additional information available

1.2.2. Uses advised against
No additional information available

1.3. Details of the supplier of the safety data sheet
Geno Technology, Inc./G-Biosciences
9800 Page Avenue
63132-1429 Saint Louis - United States
T 800-628-7730 - F 314-991-1504
technical@GBiosciences.com - www.GBiosciences.com

1.4. Emergency telephone number
Emergency number: Chemtrec 1-800-424-9300 (USA/Canada), +1-703-527-3887 (Intl)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
Not classified

Adverse physicochemical, human health and environmental effects
To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

2.2. Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]
EUH-statements: EUH210 - Safety data sheet available on request.

2.3. Other hazards
No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>(CAS-No.) 64-17-5</td>
<td>&gt;= 80</td>
<td>Flam. Liq. 2, H225</td>
</tr>
<tr>
<td></td>
<td>(EC-No.) 200-578-6</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(EC Index-No.) 603-002-00-5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Deionized water</td>
<td>(CAS-No.) 7732-18-5</td>
<td>10 - 50</td>
<td>Not classified</td>
</tr>
<tr>
<td>eosine yellow</td>
<td>(CAS-No.) 17372-87-1</td>
<td>0.5 - 2</td>
<td>Eye Irrit. 2, H319</td>
</tr>
<tr>
<td></td>
<td>(EC-No.) 241-409-6</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures
First-aid measures after inhalation: Remove person to fresh air and keep comfortable for breathing.
First-aid measures after skin contact: Wash skin with plenty of water.
First-aid measures after eye contact: Rinse eyes with water as a precaution.
First-aid measures after ingestion: Call a poison center or a doctor if you feel unwell.
4.2. Most important symptoms and effects, both acute and delayed
No additional information available

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

5.2. Special hazards arising from the substance or mixture
Hazardous decomposition products in case of fire: Toxic fumes may be released.

5.3. Advice for firefighters
Protection during firefighting: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel
Emergency procedures: Ventilate spillage area.

6.1.2. For emergency responders
Protective equipment: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions
Avoid release to the environment.

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Take up liquid spill into absorbent material.
Other information: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Ensure good ventilation of the work station. Wear personal protective equipment.
Hygiene measures: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Store in a well-ventilated place. Keep cool.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

ethanol (64-17-5)

United Kingdom - Occupational Exposure Limits

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>WEL TWA (mg/m³)</td>
<td>1920 mg/m³</td>
</tr>
<tr>
<td>WEL TWA (ppm)</td>
<td>1000 ppm</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Appropriate engineering controls: Ensure good ventilation of the work station.

Hand protection:
Protective gloves

Eye protection:
Safety glasses

Skin and body protection:
Wear suitable protective clothing
Eosin Y Solution
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according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830

Respiratory protection:
In case of insufficient ventilation, wear suitable respiratory equipment

Environmental exposure controls:
Avoid release to the environment.

SECTION 9: Physical and chemical properties
9.1. Information on basic physical and chemical properties
<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour</td>
<td>No data available</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>20 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity
10.1. Reactivity
The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Hazardous decomposition products.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity (oral)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (dermal)</td>
<td>Not classified</td>
</tr>
<tr>
<td>Acute toxicity (inhalation)</td>
<td>Not classified</td>
</tr>
</tbody>
</table>

ethanol (64-17-5)
<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>10740 mg/kg bodyweight (Rat; OECD 401: Acute Oral Toxicity, Experimental value)</td>
</tr>
<tr>
<td>LD50 dermal rabbit</td>
<td>&gt; 16000 mg/kg (Rabbit; Literature study)</td>
</tr>
<tr>
<td>LC50 inhalation rat (mg/l)</td>
<td>&gt; 20 mg/l (4 h, Rat, Inhalation)</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified</td>
</tr>
</tbody>
</table>
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<table>
<thead>
<tr>
<th>Substance</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eosin Y Solution</td>
<td>Not classified</td>
</tr>
<tr>
<td>Ethanol (64-17-5)</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

**Physical and Chemical Properties**

- **Ethanol (64-17-5) :
  - IARC group: 1 - Carcinogenic to humans
  - Log Pow: -0.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 24 °C)
  - BCF fish 1: 1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)

**Ecological Information**

**12.1. Toxicity**

- **Ecology - general**: The product is not considered harmful to aquatic organisms nor to cause long-term adverse effects in the environment.
- **Acute aquatic toxicity**: Not classified
- **Chronic aquatic toxicity**: Not classified
- **LC50 fish**: 14200 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)
- **EC50 Daphnia**: 9300 mg/l (48 h, Daphnia magna, Pure substance)
- **EC50 72h algae (1)**: 275 mg/l (Equivalent or similar to OECD 201, Chlorella vulgaris, Static system, Fresh water, Experimental value, Growth rate)

**12.2. Persistence and degradability**

- **Eosin yellow (17372-87-1)**: Biodegradability in water: no data available.

**12.3. Bioaccumulative potential**

- **Eosin yellow (17372-87-1)**: Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

**12.4. Mobility in soil**

- **Eosin yellow (17372-87-1)**: No (test)data on mobility of the substance available.

**Surface tension**

- Ethanol (64-17-5): 0.0245 N/m (20 °C)
Eosin Y Solution
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Ecology - soil | Highly mobile in soil.

12.5. Results of PBT and vPvB assessment

| Component | This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII
| This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII

12.6. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number
UN-No. (ADR) : Not applicable
UN-No. (IMDG) : UN 1170
UN-No. (IATA) : UN 1170
UN-No. (ADN) : Not applicable
UN-No. (RID) : Not applicable

14.2. UN proper shipping name
Proper Shipping Name (ADR) : Not applicable
Proper Shipping Name (IMDG) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Proper Shipping Name (IATA) : Ethanol solution
Proper Shipping Name (ADN) : Not applicable
Proper Shipping Name (RID) : Not applicable
Transport document description (IMDG) : UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
Transport document description (IATA) : UN 1170 Ethanol solution, 3, II

14.3. Transport hazard class(es)

ADR
Transport hazard class(es) (ADR) : Not applicable

IMDG
Transport hazard class(es) (IMDG) : 3
Danger labels (IMDG) : 3

IATA
Transport hazard class(es) (IATA) : 3
Hazard labels (IATA) : 3

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : II
Packing group (IATA) : II
Packing group (ADN) : Not applicable

5/11/2017 EN (English) 5/7
Packing group (RID) : Not applicable

**14.5. Environmental hazards**

Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

**14.6. Special precautions for user**

**Transport by sea**

Not applicable

**Overland transport**

Not applicable

**Transport by sea**

Special provisions (IMDG) : 144
Limited quantities (IMDG) : 1 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1
EmS-No. (Fire) : F-E
EmS-No. (Spillage) : S-D
Slowage category (IMDG) : A

Properties and observations (IMDG) : Colourless, volatile liquids. Pure ETHANOL: flashpoint 13°C c.c. Explosive limits: 3.3% to 19% Miscible with water.

**Air transport**

PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provisions (IATA) : A3, A58, A180
ERG code (IATA) : 3L

**Inland waterway transport**

Not applicable

**Rail transport**

Not applicable

**14.7. Transport in bulk according to Annex II of Marpol and the IBC Code**

Not applicable

**SECTION 15: Regulatory information**

**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture**

**15.1.1. EU-Regulations**

Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
Contains no REACH Annex XIV substances

**15.1.2. National regulations**

No additional information available

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information**

**Full text of H- and EUH-statements:**

Eye Irrit. 2 Serious eye damage/eye irritation, Category 2
## Eosin Y Solution
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**according to Regulation (EC) No. 1907/2006 (REACH) with its amendment Regulation (EU) 2015/830**

<table>
<thead>
<tr>
<th>Flam. Liq. 2</th>
<th>Flammable liquids, Category 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>H225</td>
<td>Highly flammable liquid and vapour.</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation.</td>
</tr>
<tr>
<td>EUH210</td>
<td>Safety data sheet available on request.</td>
</tr>
</tbody>
</table>

**Safety Data Sheet applicable for regions**

: **GB - United Kingdom**

**SDS EU (REACH Annex II)**

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.