Safety Data Sheet

Cat. # 786-1061

Eosin Y Solution (.5%) alcoholic

Size: 1Gallon
SECTION 1: Identification

1.1. Identification
Product form: Mixture
Product name: Eosin Y Solution
Product code: 130E_131E

1.2. Recommended use and restrictions on use
No additional information available

1.3. Supplier
Geno Technology, Inc./G-Biosciences
9800 Page Avenue
Saint Louis, 63132-1429 - 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: Hazard(s) identification

2.1. Classification of the substance or mixture
GHS US classification
Not classified

2.2. GHS Label elements, including precautionary statements
GHS US labelling
No labeling applicable

2.3. Other hazards which do not result in classification
No additional information available

2.4. Unknown acute toxicity (GHS US)
Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product identifier</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol</td>
<td>ethanol (ethyl alcohol) / ethanol, anhydrous, undenatured / ethyl alcohol</td>
<td>(CAS-No.) 64-17-5</td>
<td>&gt;= 80</td>
<td>Flam. Liq. 2, H225</td>
</tr>
</tbody>
</table>
### Eosin Y Solution

#### Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

<table>
<thead>
<tr>
<th>Name</th>
<th>Common Name (Synonyms)</th>
<th>Product identifier (CAS-No.)</th>
<th>%</th>
<th>GHS US classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>eosine yellow</td>
<td>11445 red / 11731 red / 1903 yellow pink / 2(2,4,5,7-tetramethyl-6-hydroxy-3-oxo-3H-xanthene-9-yl)benzoic acid, disodium salt / 2',4',5',7'-tetrabromo-3,6-dihydroxypropiosobenzofuran-1(3H),9'-[(9H)xanthen]-3-one disodium salt / 2,4,5,7-tetramethyl-3,6-fluoroanisol / 2,4,5,7-tetrabromo-9-o-carboxyphenyl-6-hydroxy-3-isoxanthone, disodium salt / 2',4',5',7'-tetrabromofluorescein disodium salt / acid red 87 / aizen eosine GH / bromo 4DC / bromo acid / bromo B / bromo FL / bromo fluorescein / bromo JPS / bromo TS / bromo X-100 / bromo XX / bromoeosine / bromofluoresceic acid / bronze bromo / C.I.lact acid red 87 / certifical eosine / CI 45380 / D&amp;C &amp; 22 / D&amp;C red no.22 / disodium 2-[2,4,5,7-tetrabromo-6-oxido-6,9(9H)-benzoylate / disodium eosin / eosin G / eosin Y / eosin y / certified / eosin yellowish / eosin YS / eosin / eosine 3G / eosine 3Y / eosine B / eosine BPC / eosine BS / eosine BS-SF / eosine DA / eosine DWC 73 / eosine extra conc. A. export / eosine extra yellowish / eosine FA / eosine G / eosine GF / eosine J / eosine K / eosine OJ / eosine S / eosine S13 / eosine S13 (bluish) / eosine sodium salt / eosine W/S / eosine Y / eosine YB / eosine yellowish / eosine yellowish (YS) / eosine YS / fenazo eosine XG / hidacid boiling bromo / hidacid bromo acid regular / hidacid dibromo fluorescein / hidacid eosine soda salt / hidacid white bromo / irgalite bronze red CL / phlox red toner X-1354 / phloxine B / phloxine P / phloxine red 20-7600 / phloxine toner B / pure eosine YY / S.No 881 / S.No. 881 / sodium eosinate / sodium eosine / spiro[obenzofuran-1(3H),9'-[(9H)xanthen]-3-one, 2',4',5',7'-tetrabromo-3,6-dihydroxy-3-isoxanthone, disodium salt / spyrane eosin toner / tetrabromofluorescein / tetrabromofluorescein D / tetrabromofluorescein S / tetrabromofluorescein sol / tetrabromofluorescein soluble / toyo eosine F</td>
<td>(CAS-No.) 17372-87-1</td>
<td>0.5 - 2</td>
<td>Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

Full text of hazard classes and 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/doctor/physician if you feel unwell.

**4.2. Most important symptoms and effects (acute and delayed)**

No additional information available

**4.3. Immediate medical attention and special treatment, if necessary**

Treat symptomatically.
### SECTION 5: Fire-fighting measures

- **5.1. Suitable (and unsuitable) extinguishing media**

- **5.2. Specific hazards arising from the chemical**
  - No additional information available

- **5.3. Special protective equipment and precautions for fire-fighters**
  - 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.

### SECTION 8: Exposure controls/personal protection

- **8.1. Control parameters**
  - Eosin Y Solution
    - No additional information available
  - eosine yellow (17372-87-1)
    - No additional information available
  - ethanol (64-17-5)
    - USA - ACGIH - Occupational Exposure Limits
      - ACGIH STEL (ppm)
        - 1000 ppm

- **8.2. Appropriate engineering controls**
  - Appropriate engineering controls: Ensure good ventilation of the work station.
  - Environmental exposure controls: Avoid release to the environment.

- **8.3. Individual protection measures/Personal protective equipment**
  - **Hand protection:**
    - Protective gloves
  - **Eye protection:**
    - Safety glasses
Skin and body protection:
Wear suitable protective clothing

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

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>Color</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor</td>
<td>No data available</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</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>Relative evaporation rate (butyl acetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Vapor pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapor 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>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</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>Explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No data available</td>
</tr>
<tr>
<td>Oxidizing properties</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

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

<table>
<thead>
<tr>
<th>Ethanol (64-17-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral rat</td>
<td>10740 mg/kg body weight (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             : Not classified</td>
<td></td>
</tr>
<tr>
<td>Serious eye damage/irritation         : Not classified</td>
<td></td>
</tr>
<tr>
<td>Respiratory or skin sensitization    : Not classified</td>
<td></td>
</tr>
<tr>
<td>Germ cell mutagenicity               : Not classified</td>
<td></td>
</tr>
<tr>
<td>Carcinogenicity                      : Not classified</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethanol (64-17-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>IARC group</td>
<td>1 - Carcinogenic to humans</td>
</tr>
</tbody>
</table>

| Reproductive toxicity                : Not classified |
| Specific target organ toxicity – single exposure : Not classified |
| Specific target organ toxicity – repeated exposure : Not classified |
| Aspiration hazard                    : Not classified |
| Viscosity, kinematic                 : No data available |

**SECTION 12: Ecological information**

**12.1. Toxicity**

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

<table>
<thead>
<tr>
<th>Ethanol (64-17-5)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>14200 mg/l (US EPA, 96 h, Pimephales promelas, Flow-through system, Fresh water, Experimental value)</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>9300 mg/l (48 h, Daphnia magna, Pure substance)</td>
</tr>
</tbody>
</table>

**12.2. Persistence and degradability**

**Eosine yellow (17372-87-1)**

Persistence and degradability : Biodegradability in water: no data available.

**Ethanol (64-17-5)**

Persistence and degradability : Readily biodegradable in water. Biodegradable in the soil. No (test)data on mobility of the substance available.

Biochemical oxygen demand (BOD) : 0.8 - 0.967 g O₂/g substance

Chemical oxygen demand (COD) : 1.7 g O₂/g substance

ThOD : 2.1 g O₂/g substance

BOD (% of ThOD) : 0.43

**12.3. Bioaccumulative potential**

**Eosine yellow (17372-87-1)**

Log Pow : 4.8 (Estimated value)

Bioaccumulative potential : Potential for bioaccumulation (4 ≥ Log Kow ≤ 5).

**Ethanol (64-17-5)**

BCF fish 1 : 1 (Other, 72 h, Cyprinus carpio, Static system, Fresh water, Read-across)

Log Pow : -0.35 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 24 °C)

Bioaccumulative potential : Low potential for bioaccumulation (Log Kow < 4).

**12.4. Mobility in soil**
Eosin Y Solution
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<table>
<thead>
<tr>
<th>eosine yellow (17372-87-1)</th>
<th>Ecology - soil</th>
<th>No (test)data on mobility of the substance available.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ethanol (64-17-5)</td>
<td>Surface tension</td>
<td>0.0245 N/m (20 °C)</td>
</tr>
<tr>
<td></td>
<td>Ecology - soil</td>
<td>Highly mobile in soil.</td>
</tr>
</tbody>
</table>

12.5. Other adverse effects
No additional information available

SECTION 13: Disposal considerations

13.1. Disposal methods

SECTION 14: Transport information

Department of Transportation (DOT)
In accordance with DOT

Transport document description: UN1170 Ethanol solutions, 3, II
UN-No.(DOT): UN1170
Proper Shipping Name (DOT): Ethanol solutions
Class (DOT): 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
Packing group (DOT): II - Medium Danger
Hazard labels (DOT): 3 - Flammable liquid

DOT Packaging
Non Bulk (49 CFR 173.xxx): 202
Bulk (49 CFR 173.xxx): 242
Special Provisions (49 CFR 172.102): 24 - Alcoholic beverages containing more than 70 percent alcohol by volume must be transported as materials in Packing Group II. Alcoholic beverages containing more than 24 percent but not more than 70 percent alcohol by volume must be transported as materials in Packing Group III.
IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.
TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = 97 / 1 + a (tr - tf) Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling.

DOT Packaging Exceptions (49 CFR 173.xxx): 4b;150
DOT Quantity Limitations
Passenger aircraft/rail (49 CFR 173.27): 5 L
Cargo aircraft only (49 CFR 175.75): 60 L

DOT Vessel Stowage Location: A - The material may be stowed “on deck” or “under deck” on a cargo vessel and on a passenger vessel.

Emergency Response Guide (ERG) Number: 127
Other information: No supplementary information available.

Transportation of Dangerous Goods
Not applicable

Transport by sea

Transport document description (IMDG): UN 1170 ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION), 3, II
Eosin Y Solution
Safety Data Sheet
according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

UN-No. (IMDG) : 1170
Proper Shipping Name (IMDG) : ETHANOL SOLUTION (ETHYL ALCOHOL SOLUTION)
Class (IMDG) : 3 - Flammable liquids
Packing group (IMDG) : II - substances presenting medium danger
Limited quantities (IMDG) : 1 L

Air transport
Transport document description (IATA) : UN 1170 Ethanol solution, 3, II
UN-No. (IATA) : 1170
Proper Shipping Name (IATA) : Ethanol solution
Class (IATA) : 3 - Flammable Liquids
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

eosine yellow (17372-87-1)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

ethanol (64-17-5)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

eosine yellow (17372-87-1)
Listed on the Canadian DSL (Domestic Substances List)

ethanol (64-17-5)
Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

National regulations

ethanol (64-17-5)
Listed on IARC (International Agency for Research on Cancer)

15.3. US State regulations

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 05/11/2017

Full text of H-phrases:

<table>
<thead>
<tr>
<th>H225</th>
<th>Highly flammable liquid and vapour</th>
</tr>
</thead>
<tbody>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

SDS US (GHS HazCom 2012)

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.