1. PRODUCT AND COMPANY IDENTIFICATION

<table>
<thead>
<tr>
<th>Product name</th>
<th>Eosin Y</th>
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<tbody>
<tr>
<td>Product Number</td>
<td>E4009</td>
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<tr>
<td>Brand</td>
<td>Sigma-Aldrich</td>
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<tr>
<td>Supplier</td>
<td>Sigma-Aldrich</td>
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<tr>
<td></td>
<td>3050 Spruce Street</td>
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<tr>
<td></td>
<td>SAINT LOUIS MO 63103</td>
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<tr>
<td></td>
<td>USA</td>
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<tr>
<td>Telephone</td>
<td>+1 800-325-5832</td>
</tr>
<tr>
<td>Fax</td>
<td>+1 800-325-5052</td>
</tr>
<tr>
<td>Emergency Phone #</td>
<td>(314) 776-6555</td>
</tr>
<tr>
<td>Preparation Information</td>
<td>Sigma-Aldrich Corporation</td>
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<tr>
<td></td>
<td>Product Safety - Americas Region</td>
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<tr>
<td></td>
<td>1-800-521-8956</td>
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</tbody>
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2. HAZARDS IDENTIFICATION

Emergency Overview

OSHA Hazards
No known OSHA hazards
Not a dangerous substance according to GHS.

HMIS Classification

- Health hazard: 0
- Flammability: 0
- Physical hazards: 0

NFPA Rating

- Health hazard: 0
- Fire: 0
- Reactivity Hazard: 0

Potential Health Effects

- Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
- Skin: May be harmful if absorbed through skin. May cause skin irritation.
- Eyes: May cause eye irritation.
- Ingestion: May be harmful if swallowed.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Synonyms

- Solvent red 43
- Acid Red 87
- Bromofluorescein
- Bronze Bromo ES
- Bromo acid J. TS, XL, or XX
- Eosin yellowish
- 2′,4′,5′,7′-Tetrabromofluorescein

Formula: C$_{20}$H$_8$Br$_4$O$_5$

Molecular Weight: 647.89 g/mol
No ingredients are hazardous according to OSHA criteria.

4. FIRST AID MEASURES

If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact
Wash off with soap and plenty of water.

In case of eye contact
Flush eyes with water as a precaution.

If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. FIREFIGHTING MEASURES

Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Special protective equipment for firefighters
Wear self contained breathing apparatus for fire fighting if necessary.

Hazardous combustion products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas

6. ACCIDENTAL RELEASE MEASURES

Personal precautions
Avoid dust formation. Avoid breathing vapours, mist or gas.

Environmental precautions
Do not let product enter drains.

Methods and materials for containment and cleaning up
Sweep up and shovel. Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling
Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

Conditions for safe storage
Keep container tightly closed in a dry and well-ventilated place.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Contains no substances with occupational exposure limit values.

Personal protective equipment

Respiratory protection
Respiratory protection is not required. Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Hand protection
Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove’s outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Eye protection
Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin and body protection
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the
specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**Hygiene measures**
General industrial hygiene practice.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

#### Appearance
- Form: solid
- Colour: no data available

#### Safety data
- pH: no data available
- Melting point/freezing point: no data available
- Boiling point: no data available
- Flash point: no data available
- Ignition temperature: no data available
- Auto-ignition temperature: no data available
- Lower explosion limit: no data available
- Upper explosion limit: no data available
- Vapour pressure: no data available
- Density: no data available
- Water solubility: no data available
- Partition coefficient: n-octanol/water: no data available
- Relative vapour density: no data available
- Odour: no data available
- Odour Threshold: no data available
- Evaporation rate: no data available

### 10. STABILITY AND REACTIVITY

#### Chemical stability
Stable under recommended storage conditions.

#### Possibility of hazardous reactions
no data available

#### Conditions to avoid
no data available

#### Materials to avoid
Strong oxidizing agents

#### Hazardous decomposition products
Hazardous decomposition products formed under fire conditions. - Carbon oxides, Hydrogen bromide gas
Other decomposition products - no data available

### 11. TOXICOLOGICAL INFORMATION
Acute toxicity

**Oral LD50**
no data available

**Inhalation LC50**
no data available

**Dermal LD50**
no data available

**Other information on acute toxicity**
no data available

**Skin corrosion/irritation**
no data available

**Serious eye damage/eye irritation**
no data available

**Respiratory or skin sensitisation**
no data available

**Germ cell mutagenicity**
no data available

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**Carcinogenicity**

**IARC:** No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

**ACGIH:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

**NTP:** No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

**OSHA:** No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

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**Reproductive toxicity**

no data available

**Teratogenicity**

no data available

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**Specific target organ toxicity - single exposure (Globally Harmonized System)**

no data available

**Specific target organ toxicity - repeated exposure (Globally Harmonized System)**

no data available

**Aspiration hazard**

no data available

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**Potential health effects**

**Inhalation**
May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**
May be harmful if swallowed.

**Skin**
May be harmful if absorbed through skin. May cause skin irritation.

**Eyes**
May cause eye irritation.

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**Signs and Symptoms of Exposure**
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Synergistic effects**
no data available
12. ECOLOGICAL INFORMATION

   Toxicity
   no data available

   Persistence and degradability
   no data available

   Bioaccumulative potential
   no data available

   Mobility in soil
   no data available

   PBT and vPvB assessment
   no data available

   Other adverse effects
   no data available

13. DISPOSAL CONSIDERATIONS

   Product
   Offer surplus and non-recyclable solutions to a licensed disposal company.

   Contaminated packaging
   Dispose of as unused product.

14. TRANSPORT INFORMATION

   DOT (US)
   Not dangerous goods

   IMDG
   Not dangerous goods

   IATA
   Not dangerous goods

15. REGULATORY INFORMATION

   OSHA Hazards
   No known OSHA hazards

   SARA 302 Components
   SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

   SARA 313 Components
   SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

   SARA 311/312 Hazards
   No SARA Hazards

   Massachusetts Right To Know Components
   No components are subject to the Massachusetts Right to Know Act.

   Pennsylvania Right To Know Components

      2-(3,6-Dihydroxy-2,4,5,7-tetrabromoxanthen-9-yl)-benzoic acid
      CAS-No. 15086-94-9 Revision Date 2009-07-17

   New Jersey Right To Know Components

      2-(3,6-Dihydroxy-2,4,5,7-tetrabromoxanthen-9-yl)-benzoic acid
      CAS-No. 15086-94-9 Revision Date 2009-07-17
California Prop. 65 Components
This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

Further information
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