

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

Product name: Rhodamine 590 Chloride  
 Product Number: 05901  
 Product use: For laboratory research purposes  
 Restrictions on use: Not for drug or household use  
 Safety Sheet Supplier: Oakley, Inc.  
 4000 Luxottica Place  
 Mason, OH 45040  
 USA  
 Telephone: (614) 492-5610  
 Emergency Phone: (614) 674-4846  
 E-mail address: info.exciton@luxotticaretail.com

**2. HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
 Acute toxicity, Oral (Category 4), H302

**GHS Label elements, including precautionary statements**

Pictogram



Signal word

Warning

Hazard statement(s)  
 H302

Harmful if swallowed.

Precautionary statement(s)

P264 Wash skin thoroughly after handling  
 P270 Do not eat, drink or smoke when using this product.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P330 Rinse mouth  
 P501 Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified or not covered by GHS**

None

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms: 2-[6-(ethylamino)-3-(ethylimino)-2,7-dimethyl-3H-xanthen-9-yl]-benzoic acid, methyl ester, Chloride  
 Basic Red 1:1  
 Formula: C27 H29 Cl N2 O3  
 Molecular Weight: 464.98 gm/mol  
 CAS-No.: 3068-39-1  
 EC-No.: Unknown

**Hazardous components**

2-[6-(ethylamino)-3-(ethylimino)-2,7-dimethyl-3H-xanthen-9-yl]-benzoic acid, methyl ester, Chloride

Acute Toxicity 4; H302

**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 for 15 minutes as a precaution.

**If swallowed**

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

**Most important symptoms and effects, both acute and delayed**

No further relevant information available

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

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

**Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Hydrogen chloride gas

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for fire-fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES****Personal precautions**

Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**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. Store in cool place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Hygiene measures and engineering controls**

Adequate ventilation and/or containment in accordance with good laboratory practices.

**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 impermeable 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 / face protection**

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

**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.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

|   |  |
|---|--|
| a) Appearance                                   | Form: crystalline powder<br>Color: red |
| b) Odor   | No data available                      |
| c) Odor Threshold                               | No data available                      |
| d) pH   | No data available                      |
| e) Melting point                                | >300 °C                                |
| f) Initial boiling point and boiling range      | No data available                      |
| g) Flash point                                  | No data available                      |
| h) Evaporation rate                             | No data available                      |
| i) Flammability                                 | No data available                      |
| j) Upper/lower flammability or explosive limits | No data available                      |
| k) Vapor pressure                               | No data available                      |
| l) Vapor density                                | No data available                      |
| m) Relative density                             | No data available                      |
| n) Solubility                                   | 30 gm/L in water                       |
| o) Partition coefficient: n-octanol/water       | No data available                      |
| p) Auto-ignition temperature                    | No data available                      |
| q) Decomposition temperature                    | No data available                      |
| r) Viscosity                                    | No data available                      |

## 10. STABILITY AND REACTIVITY

|  |   |
|--|---|
| a) Reactivity                                  | No data available                           |
| b) Chemical stability                          | Stable under recommended storage conditions |
| c) Possibility of hazardous reactions          | No data available                           |
| d) Conditions to avoid (e.g. static discharge) | No data available                           |
| e) Incompatible materials                      | Strong oxidizing agents                     |
| f) Hazardous decomposition products            | See Section 5.                              |

**11. TOXICOLOGICAL INFORMATION****Acute toxicity**

Oral-rat LD50: ~450mg/kg

The following data pertains to the ethyl ester. No comparable data is available for the methyl ester.

Subcutaneous-rat TDL0:100mg/kg  
Intraperitoneal-mouse LD50:2mg/kg  
Intraperitoneal-rat LD50:1.95mg/kg  
Non-mutagenic (Ames Test)  
Carcinogenic Review: animal positive

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitization**

No data available

**Germ cell mutagenicity**

No data available

**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.

**Reproductive toxicity**

No data available

**Routes of Exposure:** Inhalation, Eye contact, Ingestion, Skin contact.

**Specific target organ toxicity - single exposure**

No data available

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Signs and Symptoms of Exposure**

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

**Additional Information**

RTECS: Not 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****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**

Acute health hazard.

**Massachusetts Right To Know Components**

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

**Pennsylvania Right To Know Components**

No components are subject to the Pennsylvania Right to Know Act.

**New Jersey Right To Know Components**

No components are subject to the New Jersey Right to Know Act.

**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****HMIS Rating**

|                        |   |
|------------------------|---|
| Health hazard:         | 2 |
| Chronic Health Hazard: |   |
| Flammability:          | 0 |
| Physical Hazard:       | 0 |

**NFPA Rating**

|                    |   |
|--------------------|---|
| Health hazard:     | 2 |
| Fire Hazard:       | 0 |
| Reactivity Hazard: | 0 |

**Further information**

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