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

Identification of the substance or mixture

Product code  R302
Product name  rhodamine 123

Company/undertaking identification

Life Technologies
5791 Van Allen Way
PO Box 6482
Carlsbad, CA 92008
+1 760 603 7200

Life Technologies
5250 Mainway Drive
Burlington, ONT
CANADA L7L 6A4
800/263-6236

24 hour Emergency Response:
866-536-0631
301-431-8585
Outside of the U.S. +1-301-431-8585

For research use only. Not intended for human or animal diagnostic or therapeutic uses.

SECTION 2: Hazards identification

GHS - Classification

Signal Word
WARNING

Health hazards
Acute oral toxicity
Category 4

Physical hazards
Not Hazardous

Hazard Statements
H302 - Harmful if swallowed
**Precautionary Statements**
P301 + P312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell
P264 - Wash hands thoroughly after handling
P270 - Do not eat, drink or smoke when using this product
P330 - Rinse mouth

**Precautionary Statements**
P501 - Dispose of contents/container to an approved waste disposal plant

**Principle Routes of Exposure**

**Potential Health Effects**

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>eyes</td>
<td>May cause eye irritation with susceptible persons.</td>
</tr>
<tr>
<td>Skin</td>
<td>May cause skin irritation in susceptible persons.</td>
</tr>
<tr>
<td>inhalation</td>
<td>May be harmful by inhalation.</td>
</tr>
<tr>
<td>Ingestion</td>
<td>Harmful if swallowed.</td>
</tr>
</tbody>
</table>

**Specific effects**

<table>
<thead>
<tr>
<th>Effect</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carcinogenic effects</td>
<td>None</td>
</tr>
<tr>
<td>Mutagenic effects</td>
<td>None</td>
</tr>
<tr>
<td>Reproductive toxicity</td>
<td>None</td>
</tr>
<tr>
<td>Sensitization</td>
<td>None</td>
</tr>
</tbody>
</table>

**Target Organ Effects**

None under normal use conditions

**HMIS**

<table>
<thead>
<tr>
<th>HMIS</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health</td>
<td>1</td>
</tr>
<tr>
<td>Flammability</td>
<td>0</td>
</tr>
<tr>
<td>Reactivity</td>
<td>0</td>
</tr>
</tbody>
</table>

**SECTION 3: Composition/information on ingredients**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No</th>
<th>EINECS-No</th>
<th>Weight %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthylium, 3,6-diamino-9-[2-(methoxycarbonyl)phenyl]-, chloride</td>
<td>62669-70-9</td>
<td>-</td>
<td>60-100</td>
</tr>
</tbody>
</table>

We recommend handling all chemicals with caution.

**SECTION 4: First aid measures**

**Skin contact**
Wash off immediately with plenty of water for at least 15 minutes. Take off all contaminated clothing and wash it before reuse. Immediate medical attention is required.

**Eye contact**
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Immediate medical attention is required.

**Ingestion**
Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Do not induce vomiting without medical advice.

**inhalation**
Remove to fresh air. If not breathing, give artificial respiration. Call a physician or poison control center immediately.

**Notes to Physician**
Treat symptomatically.

**SECTION 5: Firefighting measures**

Reference: www.lifetechnologies.com
SECTION 6: Accidental release measures

Personal precautions
Ensure adequate ventilation. Avoid contact with skin, eyes or clothing. Use personal protection equipment.

Methods for cleaning up
Soak up with inert absorbent material.

Environmental precautions
Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling
Always wear recommended Personal Protective Equipment. No special handling advices are necessary.

Storage
Keep in a dry, cool and well-ventilated place. Keep in properly labeled containers.

SECTION 8: Exposure controls/personal protection

Exposure Limits

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>OSHA PEL</th>
<th>OSHA PEL (Ceiling)</th>
<th>ACGIH OEL (TWA)</th>
<th>ACGIH OEL (STEL)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthylum, 3,6-diamino-9-[2-(methoxy carbonyl)phenyl]-, chloride</td>
<td>None</td>
<td>None</td>
<td>None</td>
<td>None</td>
</tr>
</tbody>
</table>

Engineering measures
Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment
Personal Protective Equipment requirements are dependent on the user institution’s risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

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

Hand protection
Impervious gloves.

Eye protection
Goggles.

Skin and Body Protection
Lightweight protective clothing.

Hygiene measures
Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls
Prevent product from entering drains. Do not allow material to contaminate ground water system.

SECTION 9: Physical and chemical properties

General information

Form
solid

Appearance
No information available
**SECTION 10: Stability and reactivity**

**Stability**
Stable under normal conditions.

**Materials to avoid**
Strong oxidizing agents.

**Hazardous decomposition products**
Carbon oxides, Nitrogen Oxides. Sulphur oxides.

**polymerization**
None under normal processing.

**SECTION 11: Toxicological information**

**Acute Toxicity**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>LD50 (oral,rat/mouse)</th>
<th>LD50 (dermal,rat/rabbit)</th>
<th>LC50 (inhalation,rat/mouse)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthylum, 3,6-diamino-9-[2-(methoxycarbonyl)phenyl]-, chloride</td>
<td>1137 mg/kg</td>
<td>No data available</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**Principle Routes of Exposure**

**Potential Health Effects**

**eyes**
May cause eye irritation with susceptible persons

**Skin**
May cause skin irritation in susceptible persons

**inhalation**
May be harmful by inhalation

**Ingestion**
Harmful if swallowed

**Carcinogenic effects**
None

**Mutagenic effects**
None

**Reproductive toxicity**
None

**Sensitization**
None

**Target Organ Effects**
None under normal use conditions

**SECTION 12: Ecological information**

**Ecotoxicity**
Not Determined

**Acute aquatic toxicity**
Not classified for acute

**Chronic aquatic toxicity**
Not classified chronic

**Mobility**
No information available

**Biodegradation**
No information available

**Bioaccumulation**
No information available

**SECTION 13: Disposal considerations**

Revision date 03-Jul-2014
Product code R302
Product name rhodamine 123

www.lifetechnologies.com
Dispose of contents/containers in accordance with local regulations. Avoid release to the environment.

**SECTION 14: Transport information**

<table>
<thead>
<tr>
<th>IATA</th>
<th>Proper shipping name</th>
<th>No dangerous good in sense of these transport regulations.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard Class</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Subsidiary class</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>Packing group</td>
<td>None</td>
</tr>
<tr>
<td></td>
<td>UN-No</td>
<td>none</td>
</tr>
</tbody>
</table>

**SECTION 15: Regulatory information**

<table>
<thead>
<tr>
<th>Component</th>
<th>TSCA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthylum, 3,6-diamino-9-[2-(methoxycarbonyl)phenyl]-, chloride</td>
<td>Listed</td>
</tr>
</tbody>
</table>

**US Federal Regulations**

**SARA 313**
This product is not regulated by SARA.

**Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)**
This product contains the following HAPs:

**US State Regulations**

<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>Massachusetts - RTK</th>
<th>New Jersey - RTK</th>
<th>Pennsylvania - RTK</th>
<th>Illinois - RTK</th>
<th>Rhode Island - RTK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Xanthylum, 3,6-diamino-9-[2-(methoxycarbonyl)phenyl]-, chloride</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**California Proposition 65**
This product does not contain any Proposition 65 chemicals.

**WHMIS Hazard Class**

D2B - Toxic materials

![Warning Icon]
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

**SECTION 16: Other information**

**Reason for revision**
SDS sections updated.

For research use only. Not intended for human or animal diagnostic or therapeutic uses.
“The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.”

End of Safety Data Sheet