1 Product and Company Identification

1.1 Product Name: Resazurin (Sodium Salt)
1.2 Product Identifier: sodium;10-oxido-7-oxophenoxazin-10-ium-3-olate
1.3 Catalog Number: 75005
1.4 Product Use: Laboratory Chemical
1.5 Manufacturer/Supplier: STEMCELL Technologies Suite 500-1618 Station Street Vancouver, British Columbia V6A 1B6 Canada
1.6 In Case of Emergency Call: 1-800-667-0322

2 Hazards Identification

2.1 Classification of the substance or mixture
Skin Corrosion/Irritation, Category 2
Serious Eye Damage/Eye Irritation, Category 2
Specific Target Organ Toxicity (single exposure), Category 3

2.2 Label elements

Pictogram

<table>
<thead>
<tr>
<th>Signal word</th>
<th>Hazard statement(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warning</td>
<td>H315 Causes skin irritation.</td>
</tr>
<tr>
<td></td>
<td>H319 Causes serious eye irritation.</td>
</tr>
<tr>
<td></td>
<td>H335 May cause respiratory irritation.</td>
</tr>
</tbody>
</table>

Precautionary statement(s)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>P264</td>
<td>Wash (hands) thoroughly after handling.</td>
</tr>
<tr>
<td>P280</td>
<td>Wear {protective gloves/protective clothing/eye protection/face protection}.</td>
</tr>
<tr>
<td>P362</td>
<td>Take off contaminated clothing and wash it before reuse.</td>
</tr>
<tr>
<td>P261</td>
<td>Avoid breathing {dust/fume/gas/mist/vapours/spray}.</td>
</tr>
<tr>
<td>P302+352</td>
<td>IF ON SKIN: Wash with plenty of soap and water.</td>
</tr>
<tr>
<td>P332+313</td>
<td>If skin irritation occurs, get medical advice/attention.</td>
</tr>
<tr>
<td>P305+351+338</td>
<td>IF IN EYES: Rinse cautiously with water for several minutes.</td>
</tr>
<tr>
<td>P312</td>
<td>Remove contact lenses, if present and easy to do. Continue rinsing.</td>
</tr>
<tr>
<td>P337+313</td>
<td>If eye irritation persists, get medical advice/attention.</td>
</tr>
<tr>
<td>P304+340</td>
<td>Call a POISON CENTER or doctor/physician if you feel unwell.</td>
</tr>
<tr>
<td></td>
<td>IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</td>
</tr>
</tbody>
</table>
2.3 Other hazards
No data available

3 Composition / Information on Ingredients

3.1 Substances
Synonyms
7-hydroxy-10-oxidophenoxazin-10-ium-3-one, sodium; Diazoresorcinol, sodium salt
Molecular formula C_{12}H_{16}N_{2}O_{4} \cdot Na
Molecular weight 251.2

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Concentration</th>
<th>EC #</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium;10-oxido-7-oxophenoxazin-10-ium-3-olate</td>
<td>62758-13-8</td>
<td>100%</td>
<td>263-718-5</td>
</tr>
</tbody>
</table>

4 First Aid Measures

4.1 Description of first aid measures

4.1.1 If inhaled
Remove to fresh air. If not breathing, give artificial respiration or give oxygen by trained personnel. Get immediate medical attention.

4.1.2 In case of skin contact
Immediately wash skin with soap and plenty of water for at least 15 minutes. Remove contaminated clothing. Get medical attention if symptoms occur. Wash clothing before reuse.

4.1.3 In case of eye contact
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Have eyes examined and tested by medical personnel.

4.1.4 If swallowed
Wash out mouth with water provided person is conscious. Never give anything by mouth to an unconscious person. Get medical attention. Do NOT induce vomiting unless directed to do so by medical personnel.

4.2 Most important symptoms and effects, both acute and delayed
The toxicological properties of this product have not been fully evaluated.

4.3 Indication of any immediate medical attention and special treatment needed
No data available

5 Fire Fighting Measures

5.1 Extinguishing Media

5.1.1 Suitable Extinguishing Media
Use alcohol-resistant foam, carbon dioxide, water, or dry chemical spray.
Use water spray to cool fire-exposed containers.

5.1.2 Unsuitable Extinguishing Media
A solid water stream may be inefficient.
5.2 Special hazards arising from the substance or mixture

5.2.1 Flammable Properties and Hazards
No data available

5.2.2 Flash Pt
No data available

5.2.3 Autoignition Pt
No data available

5.2.4 Explosive Limits
LEL: No data available
UEL: No data available

5.2.5 Hazardous Combustion Products
No data available

5.3 Fire Fighting Instructions
As in any fire, wear self-contained breathing apparatus pressure-demand (NIOSH approved or equivalent), and full protective gear to prevent contact with skin and eyes.

6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid prolonged or repeated exposure.

6.2 Environmental precautions
Take steps to avoid release into the environment, if safe to do so.

6.3 Methods and materials for containment and cleaning up
Contain spill and collect, as appropriate.
Transfer to a chemical waste container for disposal in accordance with local regulations.

7 Handling and Storage

7.1 Precautions for safe handling
Avoid breathing dust/fume/gas/mist/vapours/spray.
Avoid prolonged or repeated exposure.

7.2 Conditions for safe storage
Keep container tightly closed.
Store in accordance with information listed on the product insert.

8 Exposure Controls/Personal Protection

8.1 Exposure limits

<table>
<thead>
<tr>
<th>Component</th>
<th>CAS #</th>
<th>Value</th>
<th>Control parameters</th>
</tr>
</thead>
</table>

75005-SDS_GHS
8.2 Engineering controls

Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits.

8.3 Personal protective equipment

8.3.1 Eye/face protection
Safety glasses

8.3.2 Skin protection
Compatible chemical-resistant gloves
Lab coat

8.3.3 Respiratory protection
NIOSH (US) or CEN (EU) approved respirator, as conditions warrant.

8.3.4 General hygiene considerations
Do not take internally.
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower.
Wash thoroughly after handling.

8.3.5 Environmental exposure controls
No data available

9 Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance A crystalline solid
Odour No data available
Odour threshold No data available
pH No data available
Melting point/freezing point No data available
Boiling point/boiling range No data available
Flash point No data available
Evaporation rate No data available
Flammability (solid, gas) No data available
Upper/lower flammability or explosive limits No data available
Vapour pressure No data available
Vapour density No data available
Relative density No data available
Solubility ~5 mg/mL in PBS (pH 7.2); ~0.5 mg/mL in EtOH, DMSO & DMF;
Partition coefficient: n-octanol/water No data available
Auto-ignition temperature No data available
Decomposition temperature No data available
Safety Data Sheet

**RESAZURIN (SODIUM SALT)**

**Effective Date:** 2015-05-05

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Viscosity</td>
<td>No data available</td>
</tr>
</tbody>
</table>

**10 Stability and Reactivity**

10.1 Reactivity                                | No data available      |
10.2 Chemical stability                        | Stable                 |
10.3 Possibility of hazardous reactions        | No data available      |
10.4 Conditions to avoid                       | No data available      |
10.5 Incompatible materials                    | Strong oxidizing agents|
10.6 Hazardous decomposition products          | carbon dioxide         |
                                                | carbon monoxide        |
                                                | nitrogen oxides        |
                                                | sodium oxides          |

**11 Toxicological Information**

11.1 Acute toxicity                           |                         |
   Oral                                         | No data available       |
   Inhalation                                   | No data available       |
   Dermal                                       | No data available       |
   Other                                        | No data available       |
11.2 Skin corrosion/irritation                 | No data available       |
11.3 Serious eye damage/eye irritation          | No data available       |
11.4 Respiratory and/or skin sensitization     | No data available       |
11.5 Germ cell mutagenicity                    | No data available       |
11.6 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. |
11.7 Reproductive toxicity                     | No data available       |
11.8 Specific target organ toxicity - single exposure | No data available       |
11.9 Specific target organ toxicity - repeated exposure | No data available       |
11.10 Aspiration hazard
No data available

11.11 Potential health effects
Inhalation: Material may be irritating to the mucous membranes and upper respiratory tract. May be harmful by inhalation. May cause respiratory tract irritation.
Ingestion: May be harmful by ingestion.
Skin: Causes skin irritation. May be harmful by skin absorption.
Eyes: Causes serious eye irritation.

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

11.13 RTECS # No data available

12 Ecological Information
12.1 Toxicity Avoid release into the environment. Runoff from fire control or dilution water may cause pollution.
12.2 Persistence and degradability No data available
12.3 Bioaccumulative potential No data available
12.4 Mobility in soil No data available
12.5 Other adverse effects No data available

13 Disposal Considerations
13.1 Waste disposal method Dispose in accordance with local, provincial/state, and federal regulations.
13.2 Contaminated packaging Dispose of as unused product.

14 Transport Information
14.1 UN number No data available
14.2 UN proper shipping name DOT Not dangerous goods
ADR/RID Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods
14.3 Transport hazard class(es) No data available
14.4 Packing group No data available
14.5 Environmental hazards No data available
14.6 Special precautions No data available
15 Regulatory Information

15.1 US EPA SARA Title III

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>Sec.302 (EHS)</th>
<th>Sec.304 RQ</th>
<th>Sec.313 (TRI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium;10-oxido-7-oxophenoxazin-10-ium-3-olate</td>
<td>62758-13-8</td>
<td>No</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>

15.2 Other US EPA or State Lists

<table>
<thead>
<tr>
<th>Hazardous Components (Chemical Name)</th>
<th>CAS #</th>
<th>CAA HAP, ODC</th>
<th>CWA NPDES</th>
<th>TSCA</th>
<th>CA PROP.65</th>
</tr>
</thead>
<tbody>
<tr>
<td>sodium;10-oxido-7-oxophenoxazin-10-ium-3-olate</td>
<td>62758-13-8</td>
<td>No</td>
<td>No</td>
<td>Yes - Inventory</td>
<td>No</td>
</tr>
</tbody>
</table>

15.3 EU

This SDS was prepared in accordance with Regulation (EC) No.1272/2008 and European Directive 67/548/EEC as amended.

15.4 Canada

WHMIS Classification: D2B Toxic Material Causing Other Toxic Effects

This SDS was prepared in accordance with Hazardous Products Regulations (HPR) and WHMIS 2015.

16 Other Information

16.1 Prepared by: Quality Control, STEMCELL Technologies Inc.

16.2 Revision: N/A

16.3 Notice: The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. STEMCELL Technologies Inc. shall not be held liable for any damage resulting from handling or from contact with the product. The information contained in this Safety Data Sheet (SDS) is current as of the Effective Date shown in this document and may be subject to amendment by STEMCELL Technologies Inc.

16.4 Disclaimer: THIS PRODUCT IS FOR RESEARCH USE ONLY. NOT INTENDED FOR HUMAN OR ANIMAL DIAGNOSTIC OR THERAPEUTIC USES.