# Safety Data Sheet

## Seliwanoff Reagent

CAROLINA®
www.carolina.com

## Section 1 Product Description

**Product Name:** Seliwanoff Reagent

**Recommended Use:** Science education applications
**Synonyms:** N/A
**Distributor:** Carolina Biological Supply Company
2700 York Road, Burlington, NC 27215
1-800-227-1150
**Chemical Information:** 800-227-1150 (8am-5pm (ET) M-F)
**Chemtrec:** 800-424-9300 (Transportation Spill Response 24 hours)

## Section 2 Hazard Identification

**Classification of the chemical in accordance with paragraph (d) of §1910.1200;**

**DANGER**

May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage. Causes serious eye damage. May cause respiratory irritation.

**GHS Classification:**
Substance or mixture corrosive to metals Category 1, Skin Corrosion/Irritation Category 1A, Serious Eye Damage/Eye Irritation Category 1, Specific Target Organ Systemic Toxicity (STOT) - Single Exposure Category 3, Acute Toxicity - Oral Category 4

**Acute Toxicity Dermal Contains** 12.4376 % of the mixture consists of ingredient(s) of unknown toxicity

## Section 3 Composition / Information on Ingredients

| Chemical Name | CAS # | % |
|---|---|---|
| Water | 7732-18-5 | 87.56 |
| Hydrogen Chloride | 7647-01-0 | 12.39 |
| Resorcinol | 108-46-3 | 0.05 |

## Section 4 First Aid Measures

**Emergency and First Aid Procedures**
**Inhalation:** IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
**Eyes:** IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
**Skin Contact:** IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.
**Ingestion:** IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

## Section 5 Firefighting Procedures

**Extinguishing Media:** Use media suitable to extinguish surrounding fire.
**Fire Fighting Methods and Protection:** Firefighters should wear full protective equipment and NIOSH approved self-contained breathing apparatus.

**Fire and/or Explosion Hazards:** Contact with combustible materials, flammable materials, or powdered metals can cause fire or explosion. Can react violently with reducing agents.

**Hazardous Combustion Products:** Carbon dioxide, Carbon monoxide, Chlorine containing gases

## Section 6 Spill or Leak Procedures

**Steps to Take in Case Material Is Released or Spilled:** Exposure to the spilled material may be severely irritating or toxic. Follow personal protective equipment recommendations found in Section 8 of this SDS. Personal protective equipment needs must be evaluated based on information provided on this sheet and the special circumstances created by the spill including; the material spilled, the quantity of the spill, the area in which the spill occurred, and the expertise of employees in the area responding to the spill. Never exceed any occupational exposure limits. Avoid contact with clothing. Avoid contact with material. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapors/spray. Large spills may be neutralized with dilute alkaline solutions of soda ash, or lime

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so. Wear complete and proper personal protective equipment following the recommendation of Section 8 at a minimum. Dike with suitable absorbent material like granulated clay. Gather and store in a sealed container pending a waste disposal evaluation. Ensure clean-up measures are in compliance with OSHA (29 CFR 1910.120). Use an inert absorbent such as sand or vermiculite. Place in properly labeled closed container. If this material is released into a work area, evacuate the area immediately. Absorb spillage to prevent material damage.

## Section 7 Handling and Storage

**Handling:** Keep only in original container. Do not breathe dust/fume/gas/mist/vapors/spray. Avoid breathing dust/fume/gas/mist/vapors/spray. Wash thoroughly after handling. Do no eat, drink or smoke when using this product. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection. Keep container tightly closed in a cool, well-ventilated place.

**Storage:** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Store in corrosive resistant/… container with a resistant inner liner. Suitable for any general chemical storage.
Keep container tightly closed in a cool, well-ventilated place.

**Storage Code:** White - Corrosive. Separate acids from bases; separate oxidizer acids from organic acids.

## Section 8 Protection Information

| | ACGIH | | OSHA PEL | |
|---|---|---|---|---|
| **Chemical Name** | **(TWA)** | **(STEL)** | **(TWA)** | **(STEL)** |
| Hydrogen Chloride | N/A | 2 ppm (Ceiling) | N/A | 5 ppm (Ceiling) |
| Resorcinol (CAS#108-46-3) 100% | 10 ppm TWA | 20 ppm STEL | N/A | N/A |

**Control Parameters**

**Engineering Measures:** Local exhaust ventilation or other engineering controls are normally required when handling or using this product to avoid overexposure.

**Personal Protective Equipment (PPE):** Lab coat, apron, eye wash, safety shower.

**Respiratory Protection:** No respiratory protection required under normal conditions of use. Wear a NIOSH approved respirator if any exposure is possible.

**Respirator Type(s):** NIOSH approved air purifying respirator with acid gas cartridge and dust/mist filter

**Eye Protection:** Wear chemical splash goggles when handling this product. Have an eye wash station available.

**Skin Protection:** Avoid skin contact by wearing chemically resistant gloves, an apron and other protective equipment depending upon conditions of use. Inspect gloves for chemical break-through and replace at regular intervals. Clean protective equipment regularly. Wash hands and other exposed areas with mild soap and water before eating, drinking, and when leaving work.

**Gloves:** Natural latex,, Butyl rubber, Nitrile, Neoprene

## Section 9 Physical Data

**Formula:** See Section 3
**Molecular Weight:** N/A
**Appearance:** Colorless
**Odor:** Strong Pungent

**Vapor Pressure:** N/A
**Evaporation Rate (BuAc=1):** N/A
**Vapor Density (Air=1):** 1.268 (hydrochloric acid)
**Specific Gravity:** N/A

**Odor Threshold:** No data available
**pH:** No data available
**Melting Point:** -114 C
**Boiling Point:** -85 C
**Flash Point:** No data available
**Flammable Limits in Air:** N/A

**Solubility in Water:** Soluble
**Log Pow (calculated):** No data available
**Autoignition Temperature:** No data available
**Decomposition Temperature:** No data available
**Viscosity:** No data available
**Percent Volatile by Volume:** 99%

## Section 10 Reactivity Data

**Reactivity:** No data available
**Chemical Stability:** Stable under normal conditions.
**Conditions to Avoid:** Reaction with water is exothermic.
**Incompatible Materials:** Water-reactive materials, Water, Caustics (bases), Oxidizing materials, Acetic anhydride, Amines, Alkanolamines, Isocyanates, Copper, Metals
**Hazardous Decomposition Products:** Chlorine containing gases, Carbon dioxide, Carbon monoxide
**Hazardous Polymerization:** Will not occur

## Section 11 Toxicity Data

**Routes of Entry** Inhalation, ingestion, eye or skin contact.
**Symptoms (Acute):** Respiratory disorders, , Eye disorders
**Delayed Effects:** No data available

**Acute Toxicity:**

| Chemical Name | CAS Number | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|---|---|---|---|---|
| Water | 7732-18-5 | Oral LD50 Rat 90000 mg/kg | | |
| Hydrogen Chloride | 7647-01-0 | Oral LD50 Rabbit 900 mg/kg | | INHALATION LC50 Rat 3700 ppm<br>INHALATION LC50 Mouse 1108 ppm<br>INHALATION LC50 Rat 45000 MG/M3<br>INHALATION LC50 Rat 8300 MG/M3 |
| Resorcinol (CAS#108-46-3) 100% | 108-46-3 | Oral LD50 Rat 301 mg/kg<br>Oral LD50 Mouse 200 mg/kg | Dermal LD50 Rabbit 3360 mg/kg | |

**Carcinogenicity:**

| Chemical Name | CAS Number | IARC | NTP | OSHA |
|---|---|---|---|---|
| Hydrogen Chloride | 7647-01-0 | Not listed | Not listed | Not listed |

**Chronic Effects:**
**Mutagenicity:** No evidence of a mutagenic effect.
**Teratogenicity:** No evidence of a teratogenic effect (birth defect).
**Sensitization:** No evidence of a sensitization effect.
**Reproductive:** No evidence of negative reproductive effects.
**Target Organ Effects:**
**Acute:** See Section 2
**Chronic:** Not listed as a carcinogen by IARC, NTP or OSHA., Mutation data cited., Reproductive data cited.

## Section 12 Ecological Data

**Overview:** Severe ecological hazard. This product may be toxic to plants and/or wildlife. Keep out of waterways.
**Mobility:** No data
**Persistence:** Evaporation into atmosphere, dissolved in water.
**Bioaccumulation:** No data

**Degradability:** No data
**Other Adverse Effects:** No data

| Chemical Name | CAS Number | Eco Toxicity |
|---|---|---|
| Water | 7732-18-5 | No data available |
| Hydrogen Chloride | 7647-01-0 | 96 HR LC50 GAMBUSIA AFFINIS 282 MG/L [STATIC] |
| Resorcinol (CAS#108-46-3) 100% | 108-46-3 | 96 HR LC50 LEUCISCUS IDUS 34.7 MG/L [STATIC]<br>96 HR LC50 PIMEPHALES PROMELAS 53.4 MG/L<br>48 HR LC50 DAPHNIA MAGNA 78 MG/L<br>72 HR EC50 CHLORELLA PYRENOIDOSA 1.1 - 72 MG/L |

## Section 13 Disposal Information

**Disposal Methods:** Dispose in accordance with all applicable Federal, State and Local regulations. Always contact a permitted waste disposer (TSD) to assure compliance.

**Waste Disposal Code(s):** Not Determined

## Section 14 Transport Information

**Ground - DOT Proper Shipping Name:**
UN1789, Hydrochloric Acid, 8, II

**Air - IATA Proper Shipping Name:**
UN1789, Hydrochloric Acid, 8, II

## Section 15 Regulatory Information

**TSCA Status:** All components in this product are on the TSCA Inventory.

| Chemical Name | CAS Number | § 313 Name | § 304 RQ | CERCLA RQ | § 302 TPQ | CAA 112(2) TQ |
|---|---|---|---|---|---|---|
| Hydrogen Chloride | 7647-01-0 | No | No | No | No | No |
| Resorcinol (CAS#108-46-3) 100% | 108-46-3 | No | 5000 lb RQ | 5000 lb final RQ; 2270 kg final RQ | No | No |

## Section 16 Additional Information

**Revised: 09/09/2015** **Replaces: 08/20/2015** **Printed: 10-29-2015**

The information provided in this (Material) Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the (Material) Safety Data Sheet.

**Glossary**

| | | | |
|---|---|---|---|
| ACGIH | American Conference of Governmental Industrial Hygienists | NTP | National Toxicology Program |
| CAS | Chemical Abstract Service Number | OSHA | Occupational Safety and Health Administration |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act | PEL | Permissible Exposure Limit |
| DOT | U.S. Department of Transportation | ppm | Parts per million |
| IARC | International Agency for Research on Cancer | RCRA | Resource Conservation and Recovery Act |
| N/A | Not Available | SARA | Superfund Amendments and Reauthorization Act |
| | | TLV | Threshold Limit Value |
| | | TSCA | Toxic Substances Control Act |
| | | IDLH | Immediately dangerous to life and health |