

# Material Safety Data Sheet

30% Salicylate Solution – sodium nitroprusside

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## 1. Product Identification

**Synonyms:** CA-6 Analyzer Ammonia Reagent #2

**CAS No.:** Not applicable to mixtures.

**Molecular Weight:** Not applicable to mixtures.

**Chemical Formula:** Not applicable to mixtures.

**Product Codes:**

ECD P/N 2010017-1

**Manufacture By:**

Electro-Chemical Devices, Inc.

1681 Kettering

Irvine, CA 92614

**Phone:** (800) 729-1333

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## 2. Composition/Information on Ingredients

| Ingredient           | CAS No     | Percent | Hazardous |
|----------------------|------------|---------|-----------|
| -----                | -----      | -----   | -----     |
| Sodium Salicylate    | 54-21-7    | 30%     | No        |
| Sodium Nitroprusside | 13755-38-9 | >1%     |           |
| Water                | 7732-18-5  | > 70%   | No        |

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## 3. Hazards Identification

### Emergency Overview

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**Appearance:** Amber colored clear liquid.

**Warning!** Harmful if swallowed. Causes eye, skin, and respiratory tract irritation.

Target Organs: Kidneys, heart, central nervous system, liver, respiratory system, gastrointestinal system, eyes, skin

### **Potential Health Effects**

**Eye:** Causes eye irritation.

**Skin:** Causes skin irritation. May be harmful if absorbed through the skin

**Ingestion:** Harmful if swallowed. May cause irritation of the digestive tract May cause visual and respiratory

**Inhalation:** Causes respiratory tract irritation May be harmful if inhaled

**Chronic:** Adverse reproductive effects have been reported in animals

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### **4. First Aid Measures**

**Eyes:** Immediately flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.

**Skin:** Get medical aid. Immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

**Ingestion:** Do not induce vomiting. Get medical aid immediately. Call a poison control center.

**Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid.

**Notes to Physician:** Treat symptomatically and supportively.

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### **5. Fire Fighting Measures**

**Fire:**

Not considered to be a fire hazard.

**Explosion:**

Not considered to be an explosion hazard.

**Fire Extinguishing Media:**

Use any means suitable for extinguishing surrounding fire.

**Special Information:**

Use protective clothing and breathing equipment appropriate for the surrounding fire.

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### **6. Accidental Release Measures**

**General Information:** Use proper personal protective equipment as indicated in Section 8.

**Spills/Leaks:** Absorb spill with inert material (e.g. vermiculite, sand or earth), then place in suitable container. Provide ventilation. Do not let this chemical enter the environment.

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## 7. Handling and Storage

**Handling:** Wash thoroughly after handling. Do not get in eyes, on skin, or on clothing. Do not ingest or inhale. Use with adequate ventilation.

**Storage:** Store in a cool, dry place. Store in a tightly closed container.

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## 8. Exposure Controls/Personal Protection

### Ventilation System:

In general, dilution ventilation is a satisfactory health hazard control for this substance. However, if conditions of use create discomfort to the worker, a local exhaust system should be considered.

### Personal Protection

**Eyes:** Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.

**Skin:** Wear appropriate protective gloves to prevent skin exposure.

**Clothing:** Wear appropriate protective clothing to prevent skin exposure.

**Respirators:** Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced.

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## 9. Physical and Chemical Properties

### Appearance:

Clear, amber colored liquid.

### Odor:

Odorless.

### Solubility:

Complete (100%)

### Specific Gravity:

1.2

### pH:

Neutral, pH 5-9

### % Volatiles by volume @ 21C (70F):

ca. 99

### Boiling Point:

100°-108°C

### Melting Point:

No information found.

### Vapor Density (Air=1):

Not applicable.

### Vapor Pressure (mm Hg):

Not applicable.

**Evaporation Rate (BuAc=1):**

No information found.

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## 10. Stability and Reactivity

**Chemical Stability:** Light sensitive.

**Conditions to Avoid:** Incompatible materials, light.

**Incompatibilities with Other Materials:** Strong oxidizing agents, acids, strong bases, ferric salts, lead acetate, lead, lime water, silver nitrate, iodine.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen oxides, carbon monoxide, carbon dioxide, sodium oxide

**Hazardous Polymerization:** Has not been reported.

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## 11. Toxicological Information

**RTECS#:**

CAS# 7732-18-5: ZC0110000

CAS# 54-21-7: VO5075000

CAS# 13755-38-9: LJ8925000

**LD50/LC50:**

CAS# 7732-18-5:

Oral, rat: LD50 = >90 mL/kg;

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CAS# 54-21-7:

Oral, mouse: LD50 = 540 mg/kg;

Oral, rabbit: LD50 = 1700 mg/kg;

Oral, rat: LD50 = 930 mg/kg;

CAS# 14402-89-2:

Oral, mouse: LD50 = 61 mg/kg;

Oral, rabbit: LD50 = 34 mg/kg;

Oral, rat: LD50 = 99 mg/kg;

**Carcinogenicity:**

CAS# 7732-18-5: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 54-21-7: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

CAS# 13755-38-9: Not listed by ACGIH, IARC, NTP, or CA Prop 65.

**CAS# 54-21-7**

**Epidemiology:** No information available

**Teratogenicity:** Teratogenic effects have occurred in experimental animals

**Reproductive Effects:** Adverse reproductive effects have occurred in experimental animals

**Mutagenicity:** Mutagenic effects have occurred in experimental animals

**Neurotoxicity:** No information available

**CAS# 13755-38-9:**

**Epidemiology:** No information found

**Teratogenicity:** Nitroprusside was not teratogenic when tested in rats. Use of nitroprusside during human pregnancy has been described, both for hypertensive emergencies and to induce hypotension, as in aneurysm surgery. No fetal problems have been attributed to drug therapy. Because nitroprusside can also be a source of cyanide, there has been concern that maternal therapy might produce cyanide toxicity in the offspring.

**Reproductive Effects:** See actual entry in RTECS for complete information.

**Mutagenicity:** See actual entry in RTECS for complete information.

**Neurotoxicity:** No information found

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## 12. Ecological Information

**Eco-toxicity:** No data available. No information available.

**Environmental:** This substance is expected to have a high biological oxygen demand. It is readily biodegradable and has low bio-concentration potential.

**Physical:** No information available.

**Other:** Do not empty into drains.

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## 13. Disposal Considerations

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3.

Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.

**RCRA P-Series:** None listed.

**RCRA U-Series:** None listed.

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## 14. Transport Information

**US DOT** Not regulated

**Shipping Name:** Sodium Salicylate solution

**Hazard Class:**

**UN Number:**

**Packing Group:**

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## **15. Regulatory Information**

### **US FEDERAL**

#### **TSCA**

CAS# 54-21-7 is listed on the TSCA inventory. CAS# 13755-38-9 is not on the TSCA Inventory because it is a hydrate. It is considered to be listed if the CAS number for the anhydrous form is on the inventory (40CFR720.3 (u) (2)).

CAS# 14402-89-2 is listed on the TSCA inventory.

#### **Health & Safety Reporting List**

None of the chemicals are on the Health & Safety Reporting List.

#### **Chemical Test Rules**

None of the chemicals in this product are under a Chemical Test Rule.

#### **Section 12b**

None of the chemicals are listed under TSCA Section 12b.

#### **TSCA Significant New Use Rule**

None of the chemicals in this material have a SNUR under TSCA.

#### **CERCLA Hazardous Substances and corresponding RQs**

None of the chemicals in this material have an RQ.

#### **SARA Section 302 Extremely Hazardous Substances**

None of the chemicals in this product have a TPQ.

#### **SARA Codes**

CAS # 54-21-7: immediate, delayed.

CAS # 13755-38-9: immediate, delayed.

CAS # 14402-89-2: immediate, delayed.

**Section 313** No chemicals are reportable under Section 313.

#### **Clean Air Act:**

This material does not contain any hazardous air pollutants.

This material does not contain any Class 1 Ozone depleters.

This material does not contain any Class 2 Ozone depleters.

#### **Clean Water Act:**

None of the chemicals in this product are listed as Hazardous Substances under the CWA.

None of the chemicals in this product are listed as Priority Pollutants under the CWA.

None of the chemicals in this product are listed as Toxic Pollutants under the CWA.

#### **OSHA:**

None of the chemicals in this product are considered highly hazardous by OSHA.

### **STATE**

CAS# 54-21-7 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

CAS# 13755-38-9 can be found on the following state right to know lists: California, (listed as Iron salts (soluble)), Minnesota, (listed as Iron salts (soluble)).

CAS# 14402-89-2 is not present on state lists from CA, PA, MN, MA, FL, or NJ.

California Prop 65

California No Significant Risk Level: None of the chemicals in this product are listed.

**European/International Regulations**

**European Labeling in Accordance with EC Directives**

**Hazard Symbols:**

XN

**Risk Phrases:**

R 22 Harmful if swallowed.

R 36/37/38 Irritating to eyes, respiratory system and skin.

**Safety Phrases:**

S 26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S 37/39 Wear suitable gloves and eye/face protection.

**WGK (Water Danger/Protection)**

CAS# 54-21-7: 1

CAS# 13755-38-9: 2

CAS# 14402-89-2: No information available.

**Canada - DSL/NDSL**

CAS# 54-21-7 is listed on Canada's DSL List.

CAS# 14402-89-2 is listed on Canada's DSL List.

**Canada - WHMIS**

This product has a WHMIS classification of D2B.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all of the information required by those regulations.

**Canadian Ingredient Disclosure List 16**

CAS# 13755-38-9 is not listed on the Canadian Ingredient Disclosure List.

**NFPA Ratings:** Health: **1** Flammability: **0** Reactivity: **0**

**Label Hazard Warning:**

As part of good industrial and personal hygiene and safety procedure, avoid all unnecessary exposure to the chemical substance and ensure prompt removal from skin, eyes and clothing.

**Label Precautions:**

None.

**Label First Aid:**

Not applicable.

**Product Use:**

Laboratory Reagent.

**Revision Information:**

MSDS-2010017-1 rev. a Dec. 2012

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