SDS for: Liquid Silver Dip

1. Identification

Product Name: **Liquid Silver Dip**
Synonyms: **N/A**
CAS Number: Mixture
Product Use: Silverware Presoak
Manufacturer: Solvit Inc.
Address: 7001 Raywood Rd. Madison WI, 53713
Phone: (608) 222-8624
Emergency Response Number: **John Kelly 608-695-4637**

2. Hazards Identification

GHS Classification:

Health	Environmental	Physical
Skin corrosion – Category 1C H314 Eye damage/Irritation – Category 1 H318 Acute toxicity–Oral-Category 4 H302		May be corrosive to metals – Category 1 H290

GHS Label:

Symbols: Corrosion, Exclamation Mark

Hazard Statements	**Precautionary Statements**
Danger! Causes severe skin burns and eye damage Causes serious eye damage **Warning!** May be corrosive to metals Harmful if swallowed	Do not breathe dusts or mists Wash face, hands and any exposed skin thoroughly after handling. Wear protective gloves/protective clothing/eye protection/face protection. Wear eye protection/face protection.

	Do not eat, drink or smoke when using this product. Keep only in original container. IF SWALLOWED: rinse mouth. Do NOT induce vomiting. IF ON SKIN (or hair): remove/take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse. IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing Immediately call a POISON CENTER or doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present, and easy to do. Continue rinsing. Store locked up. Absorb spillage to prevent material damage. Store in corrosive resistant plastic container. Dispose of contents/container according to local/state/federal regulations.

3. Composition/Information on ingredients

Component	CAS Number	Weight%
Sodium Carbonate	497-19-8	3-10
Sodium Hydroxide	1310-73-2	6-15
Sodium Octanesulfonate	5324-84-5	1-5
2-Butoxyethanol	111-76-2	1-5
Sodium Xylene Sulphonate	1300-72-7	1-5

4. First Aid

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes while holding eye lids open. Tilt head to avoid contaminating unaffected eye. Get immediate medical attention. Washing eyes within several seconds is essential to achieve maximum effectiveness. Remove contacts if easy to do so.

Skin Contact: Immediately flush skin with plenty of water for at least 15 minutes. Remove contaminated clothing and wash thoroughly before reuse. Get medical attention immediately. If skin feel slippery, caustic may still be present in sufficient quantities to cause a rash or burn. Continue washing skin until slick feeling is gone. Discard footwear which cannot be decontaminated. Discard contaminated articles, such as gloves, shoes, belts.

Inhalation: Remove to fresh air. If breathing is difficult, administer oxygen. If not breathing, give artificial respiration, preferably mouth to mouth. **GET MEDICAL ATTENTION IMMEDIATLEY.**

Ingestion: If fully conscious, drink a quart of water. DO NOT induce vomiting. CALL A PHYSICIAN IMMEDIATLEY. If unconscious or in convulsions, take immediately to a hospital or a physician. NEVER induce vomiting or give anything by mouth to an unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration of liquid into the lungs.

Note to Physicians: Probable mucosal damage may contraindicate the use of gastric lavage. The absence of visible signs of symptoms of burns does not reliably exclude the presence of actual tissue damage.

Most Important Symptoms/Effects:

Eye Contact: CORROSIVE-Causes severe irritation and burns. May cause corneal damage, impaired vision, eye damage, permanent eye damage of blindness.

Skin Contact: CORROSIVE-Causes serve irritation and burns. Contact may cause redness, swelling, dermatitis (inflammation of the skin), scab formation, ulceration or permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue.

Skin Absorption: Material can penetrate to deep layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration and duration of exposure.

Inhalation: CORROSIVE-Causes severe irritation and burns. May irritate or damage nose, mouth, throat and lungs. Vapors or mists may damage the respiratory tract. May cause shortness of breath, wheezing, coughing, sneezing, choking, impaired lung function, pulmonary edema, ulceration and perforation of the nasal septum pneumonitis and death.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause damage to the mouth, throat, stomach and gastrointestinal tract. May cause nausea, vomiting, bloody vomiting, diarrhea, abdominal pain, bleeding, ulcerations, severe gastrointestinal damage, perforation of the intestinal tract and death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Aspiration into the lungs may cause chemical pneumonia and lung damage.

5. Fire Fighting Measures

Extinguishing Media: Not combustible. For fires in area, use appropriate media, such as Water spray, Dry Chemical or foam.

Fire Fighting Methods: Evacuate the area of unprotected personnel. Wear protective clothing including NIOSH approved self-contained breathing apparatus. Remain upwind of fire to avoid hazardous vapors and decomposition by-products. Use water spray to cool fire-exposed containers and disperse or minimize vapors. Move containers from fire area if possible to do without hazard.

Fire and Explosion Hazards: Product may react with some metals (ex: Aluminum, Zinc, Tin, etc.) to release flammable hydrogen gas. Thermal decomposition may release toxic or corrosive fumes. Fire or intense heat may cause rupture of packages.

Hazardous Combustion Products: None known.

6. Accidental Release Measures

Spill Clean Up Procedures: CORROSIVE MATERIAL. Evacuate unprotected personnel from area. Maintain adequate ventilation. Follow personal protective equipment regulations found in section 8. Never exceed any occupational exposure limits. Contain spills immediately with inert materials such as sand or earth. Place spilled material into plastic drums for proper disposal. Neutralize remaining residue with hydrochloric acid/water solution and dispose of properly. Flush remaining area with water to remove trace residue and dispose of properly. CAUTION: This product may react violently with acids. Vapors may be suppressed by the use of a water fog. Avoid direct discharge to sewers and surface waters. Contain all run-offs for treatment and/or proper disposal.

7. Handling and Storage

Handling: Avoid contact with eyes, skin and clothing. Use with adequate ventilation. Do not swallow. Avoid breathing vapors, mist or dust. Do not eat, drink or smoke in work area. Wash thoroughly after handling. Empty containers retain product residue (vapor, dust or liquid) and can be dangerous.

Storage: CORROSIVE MATERIAL. Store in a cool, well ventilated area, out of direct sunlight. Store in a dry location away from incompatible materials, such as acids. Keep containers tightly closed. Do not store in unlabeled or mislabeled containers. Do not store in aluminum containers or use aluminum fittings or transfer lines.

Highly corrosive to most metals, with the evolution of hydrogen gas. Contact of caustic potash based cleaners with food and beverage products (in enclosed spaces) can produce lethal concentrations of carbon monoxide gas. Do not freeze.

8. Exposure Controls/Personal Protection

OSHA Exposure Guidelines:

Component	**Limits**
No components found	

ACGIH Exposure Guidelines:

Components	**Limits**
Sodium Hydroxide	2 mg/ m3 Ceiling

Engineering Controls: General room ventilation is required. Use local exhaust to control vapors, mists or dusts. Maintain adequate ventilation. Do not use in closed confined spaces. Avoid creating vapors, dusts, or mists. Keep levels below exposure limits. To determine exposure levels, monitoring should be performed regularly. NOTE: Where carbon monoxide may be generated, special ventilation may be required.

Eye/Face Protection: Wear chemical safety gloves and a full face shield while handling this product. Do not wear contact lenses.

Skin Protection: Prevent contact with this product. Wear gloves and protective clothing depending on condition of use. Protective gloves: Rubber (latex), Buytl rubber, Polyvinyl chloride, Nitrile, Tychem or Neoprene.

Respiratory Protection: If vapors or mists are present, wear: NIOSH-approved respirator or breathing apparatus. DO NOT exceed limits established by the respirator manufacturer. All respiratory protection programs must comply with OSHA 29 CFR 1910.134 and ANSI Z88.2 requirements and must be followed whenever workplace conditions require a respirator's use.

Other Protective Equipment: Eye-wash station, safety shower, rubber apron, full chemical suit, rubber boots and protective clothing.

General Hygiene Condition: Wash with soap and water before meal times and at the end of each work shift. Good Hygiene practices require gross amounts of any chemical to be removed from skin as soon as practical, especially before eating or smoking.

9. Physical and Chemical Properties

Physical State: Liquid
Color: Red
Odor: Typical
Boiling Point (deg. F.): 216
Melting Point (deg. F.): N/A
Freezing Point (deg. F.): N/D
Vapor Pressure (mm Hg): N/D
Vapor Pressure (Air=1): N/D
Solubility in water: Complete
PH: 13.4
Specific Gravity: 1.080 @67 deg.
% Volatile (wt. %): N/D
Evaporation Rate (nBuAc=1): N/D
VOC (wt. %): 0
VOC (lbs. /gal): 0
Viscosity: Water Thin
Flash Point: N/A
Flash Point Method: N/A
Lower Explosion Limit: N/A
Upper Explosion Limit: N/A
Auto-ignition Temperature: N/A
Fire Point: N/A

10. Stability and Reactivity

Stability: Stable under normal conditions.

Reactivity: No dangerous reactions known under conditions of normal use.

Conditions to avoid: Contact with acids or incompatible materials may cause a violent reaction with the evolution of heat. Product may react with some metals to release flammable hydrogen gas. Corrosive to steels at elevated temperatures. Contact with food and beverage products in enclosed vessels or spaces can produce lethal amounts of carbon monoxide gas.

Incompatible materials: Acids, Acrolein, Acrylonitrile, Chlorinated hydrocarbons, chlorine dioxide, Maleicanhydride, Nitroethane, Nitroparaffins, 2-Nitrophenol, Nitropropane, Phosphorus, Potassium persulfate, Tetrahydrofuran, Organic nitro compounds, Explosives, Organic peroxides, Halogenated compounds,
Chlorinated alkenes, Carbohydrates. Metals such as, Aluminum, Zinc, Tin, Brass, Bronze, Copper, and Lead. Oxidizing agents, flammable liquids and other alkali sensitive metals and alloys. Can attack some forms of plastic.

Hazardous decomposition products: May react with certain metals to release hydrogen gas.

11. Toxicological Information

Component	Oral LD50	Dermal LD50	Inhalation LC50
Sodium Hydroxide	Rat: 214 mg/kg	>500 mg/kg	No Data

Other Information

Acute Toxicity estimate: Oral-473 mg/kg

Routes of exposure: Eyes, Ingestion, Inhalation and Skin.

Eye Contact: CORROSIVE-Causes skin irritation and burns. May cause corneal damage, impaired vision, eye damage, permanent eye damage or blindness.

Skin Contact: CORROSIVE-Causes severe irritation and burns. Contact may cause, redness, swelling, dermatitis (swelling of the skin), scab formation, ulceration or permanent skin damage. Effects from chronic skin exposure would be similar to those from single exposure and may include effects secondary to tissue destruction.

Skin absorption: Material can penetrate to deep layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration and duration of exposure.

Inhalation: CORROSIVE-Causes severe irritation and burns. May irritate or damage nose, mouth, throat and lungs. Vapors or mists may damage respiratory tract. May cause a shortness of breath, wheezing, coughing, sneezing, choking, chest pain, ulceration and perforation of the nasal septum, impaired lung function, pulmonary edema, pneumonitis and death.

Ingestion: CORROSIVE-Causes severe irritation and burns. May cause damage mouth, throat, stomach and gastrointestinal tract. May cause nausea, vomiting, diarrhea vomiting (bloody), abdominal pain, bleeding, ulcerations, severe gastrointestinal damage, perforation of the intestinal tract and death. Blood loss through damaged tissue can lead to low blood pressure and shock. Effects from chronic exposure would be similar to those from single exposure and may include effects secondary to tissue destruction. Aspiration into the lungs may cause chemical pneumonia and lung damage.

Medical conditions aggravated by exposure to product: Asthma, respiratory disorders, eye disorders and cardiovascular disorders.

Other: This material will affect all tissues with which it may come in contact. The severity of the tissue damage is a function of concentration, the length of tissue contact time and local tissue conditions. After exposure, there may be a time delay before irritation and other effects occur.

12. Ecological Information

Ecotoxicological Information: No Data available

Chemical fate information: No data available

13. Disposal Considerations

Disposal Method: Dispose of in a permitted hazardous waste management facility following all local, state and federal regulations. If approved, flush to sewer with large quantities of water.

14. Transportation Information

DOT (Department of Transportation):

Identification Number: UN 1760
Proper Shipping Name: Corrosive liquids n.o.s.
Hazard Class: 8
Packaging Group: II
Label Required: CORROSIVE
Reportable Quantity: 1000 lbs. (Potassium Hydroxide)

15. Regulatory Information

TSCA Inventory Status: All components of this product are on the TSCA inventory or are exempt from TSCA inventory requirements.

SARA Title III Section 311 / 312 Category Hazards:

Immediate	Delayed (Chronic)	Fire Hazard	Pressure Release	Reactive
Yes	No	Yes	No	Yes

Regulated Components:

Component	CAS No.	CERCLA-RQ	SARA-EHS	SARA-313
Sodium Hydroxide	**1310-73-2**	**Yes**	**No**	**No**

U.S.-HAP	WI-HAP	Prop-65
No	Yes	No

Prop 65: May contain the following trace components: No data available

16. Other Information

Hazard Rating System:
Health: 3
Flammability: 0
Reactivity: 1

NFPA Rating System:
Health: 3
Flammability: 0
Reactivity: 1
Special Hazard: None

SDS Abbreviations:

N/A = Not Applicable
N/D = Not Determined
HAP = Hazardous Air Pollutant
VOC = Volatile Organic Compound
C = Ceiling
N/E = Not established

SDS Prepared by: SK

Revision Date: 3/12/2015

Reason for Revision: To comply with the GHS

Disclaimer: The data in this SDS relates to the specific material indicated and does not relate to its use in combination with any other material or process. The data provided in this SDS is believed to be correct to the best of our knowledge.
Solvit Inc. makes no warranty of any kind, expressed or implied, concerning the safe use of this product in your process or in combination with other substances.
This information is provided solely for your consideration, investigation and verification.