

MSDS - Material Safety Data Sheet

Product Name: *Physical Developer (Solution A)*

MSDS No.: LPD100/1A

I. Basic Information:

Manufacturer: Sirchie Finger Print Laboratories

Address: 100 Hunter Place

City, ST Zip: Youngsville, NC 27596

Emergency Contact: CHEMTREC

Emergency Telephone Number: 800-424-9300

Contact: Tech Support

Information Telephone Number: 919-554-2244

Last Update: 2-4-2008

Expiration Date:

Chemical State: Liquid Gas Solid

Chemical Type: Pure Mixture



| | |
|---|------------------|
| 2 | Health |
| 0 | Flammability |
| 1 | Reactivity |
| H | Pers. Protection |

II. Ingredients:

Trade Secret

| CAS No. | Chemical Name | % Range | EHS | | IARC | | SARA 313 | | OSHA PEL | ACGIH TLV | Other Limits |
|---------|----------------|---------|-----|--|-------|--|----------|--|-----------|-----------|--------------|
| | | | NTP | | SUB Z | | | | | | |
| 7761888 | Silver nitrate | 20 | | | | | | | .01 mg/m3 | .01 mg/m3 | |
| 7732185 | Water | 80 | | | | | | | None | None | 212 F |

III. Hazardous Identification:

Hazard Category:

Acute Chronic Fire Pressure Reactive

Hazardous Identification Information:

Oxidizer. May be fatal if swallowed. May be harmful if inhaled. Respiratory and digestive tract irritant. May cause skin and eye burns. May cause argyria, a blue-grey discoloration of the skin, eyes, and mucous membranes.

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

IV. First Aid Measures:

Route(s) of Entry:

Inhalation, ingestion, skin, eyes

Health Hazards (Acute and Chronic):

Acute: Skin and eye burns

Chronic: Argyria, a blue-grey discoloration of the skin, eyes, and mucous membranes.

Signs and Symptoms:

Ingestion: Burns, abdominal pain, vomiting, nausea, diarrhea, dizziness

Medical Conditions Generally Aggravated by Exposure:

Skin, eye, respiratory diseases

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MSDS No.: LPD100/1A

Emergency and First Aid Procedures:

Inhalation: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen (To be administered by qualified medical personnel only!) Get medical attention.

Ingestion: DO NOT induce vomiting. If victim is conscious and alert, give 2-4 cups of water. (Never give anything by mouth to an unconscious person!) Call a Poison Control Center. Get medical attention immediately.

Skin: Flush skin with plenty of soap and water for at least 15 minutes. Remove contaminated clothing. Destroy contaminated shoes. Seek medical attention.

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower lids. Do not allow victim to rub or keep eyes closed. Get medical aid immediately.

Note to physicians: Absorption of silver nitrate into the body leads to the formation of methemoglobin that, in sufficient concentrations, causes cyanosis. Since reversion of methemoglobin to hemoglobin occurs spontaneously after termination of exposure, moderate degrees of cyanosis need to be treated only by supportive measures such as bed rest and oxygen inhalation. Thorough cleaning of the entire contaminated area of the body, including scalp and nails, is of utmost importance. If cyanosis is severe, intravenous injection of methylene blue, 1 milligram per kilogram (1 mg/kg) of body weight, may be of value.

Other Health Warnings:

V. Fire Fighting Measures:

Flash Point: NE

Lower Explosive Limit: NE

Upper Explosive Limit: NE

F.P. Method:

Fire Extinguishing Media: Flood with water

Special Fire Fighting Procedures:

Wear self-contained breathing apparatus and protective clothing.

Unusual Fire and Explosion:

Oxidizer--contact with combustible materials may cause a fire.

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

VI. Accidental Release Measures:

Steps to be Taken in Case Material is Released or Spilled:

Wear vapor respirator, safety goggles, and rubber gloves. Remove sources of ignition (i.e. open flames, sparks). Soak up with inert absorbent material (do not use flammable substances such as sawdust). Clean spill area thoroughly to remove residual contamination. Dispose according to local, state, and federal regulations.

VII. Handling and Storage:

Precautions to be Taken:

Keep in closed container. Avoid incompatible materials, ESPECIALLY combustible materials. Use only in well-ventilated areas. Avoid inhalation. Avoid contact with skin, eyes, and clothing. Wash thoroughly after handling.

Other Precautions:

"Empty" containers may contain product residue and may be dangerous. Empty containers should be completely drained and bunged and then disposed of according to local, state, and federal regulations.

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MSDS No.: LPD100/1A

VIII. Exposure Controls/Personal Protection:

Ventilation Requirements:

Use only in well-ventilated areas.

Personal Protective Equipment:

Safety goggles, gloves, vapor respirator, protective clothing

IX. Physical and Chemical Properties:

Boiling Point: ~212 F

Melting Point: ~32 F

Evaporation Rate (Butyl Acetate = 1): NE

Vapor Pressure (mm Hg.): NE

Specific Gravity (H₂O = 1):

Vapor Density (AIR = 1): NE

Solubility In Water: Complete

Appearance and Odor:

Other Information:

X. Stability and Reactivity:

Stability:

Stable

Incompatibility (Materials to Avoid):

Combustible materials, reducing agents, aqueous ammonia

Decomposition/By Products:

Nitrogen oxides

Hazardous Polymerization:

Will not occur.

XI. Toxicological Information:

XII. Ecological Information:

Prevent from entering sewers or waterways. May be toxic to some aquatic life.

XIII. Disposal Considerations:

Dispose according to local, state, and federal regulations.

XIV. Transport Information:

IATA

Shipping name: Silver nitrate solution

Hazard class: 5.1

UN no.: 1493

Packing group: II

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XV. Regulatory Information:

This material is subject to the reporting requirements of Section 313 of SARA Title III and 40 CFR Part 373.

XVI. Other Information:

Using this product under normal, properly instructed procedures should not be hazardous.

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, expressed or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigation to determine the suitability of the information for their particular purposes.