1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT IDENTIFICATION
Product Name ................ Archive Fixer Remover
Catalog Number .............. N/A
Chemical Name .............. Mixture
Common Name .............. N/A
Product Use ................. Remove photographic fixer.

MANUFACTURER
Sprint Systems of Photography, Inc.
1057 Chopmist Hill Road
Scituate, RI 02857
800 356-5073

EMERGENCY TELEPHONE NUMBER
ChemTel (1-800-255-3924)

2. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>CHEMICAL NAME</th>
<th>CAS NUMBER</th>
<th>OSHA PEL</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ethylene glycol</td>
<td>107-21-1</td>
<td>N/E</td>
<td>100 mg/m³ (aerosol)</td>
</tr>
<tr>
<td>Potassium salts of diethylenetriamine-</td>
<td>Mixture</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>pentaacetic acid</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sodium metabisulfite</td>
<td>7681-57-4</td>
<td>N/E</td>
<td>5 mg/m³</td>
</tr>
<tr>
<td>Sodium sulfate</td>
<td>7757-83-7</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>N/E</td>
<td>N/E</td>
</tr>
</tbody>
</table>

See Section 15 for OSHA Regulatory Status.

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW
Blue to moss green solution with a slight sulfur dioxide odor.
Absorbed through skin. May cause life-threatening asthma.
Warning! May cause skin sensitization. May cause mild irritation to skin, eyes, and the respiratory tract. May be suitable for the material that is burning.

POTENTIAL HEALTH EFFECTS

PRIMARY ROUTE(S) OF ENTRY
Inhalation (breathing), eye and skin contact

SYMPTOMS OF EXPOSURE

Skin Contact: May cause mild irritation. May be absorbed through skin and cause symptoms like those for ingestion of ethylene glycol. May cause skin sensitization.

Inhalation: Breathing vapors may irritate the mucous membranes of the nose, throat, respiratory tract, and may cause headache, light-headedness, dizziness, and nausea.

Eye Contact: May cause mild irritation.

Ingestion: Can cause kidney damage, and may be toxic to the embryo or cause teratogenic effects. Can cause life-threatening asthma.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE
Pre-existing skin disorders, eye problems, or impaired liver and kidneys. Persons sensitized to sodium metabisulfite or sodium sulfate are at risk.

REPORTED AS CARCINOGEN OR POTENTIAL CARCINOGEN

✓ Not Applicable
OSHA Suspect Carcinogen
National Toxicology Program (NTP)
International Agency for Research on Cancer (IARC)
4. **FIRST AID MEASURES**

**Skin contact:** Wash affected areas with plenty of water, and soap if available, for several minutes. Seek medical attention if irritation develops and persists.

**Inhalation:** Remove from area to fresh air. If not breathing, clear airway and start mouth-to-mouth artificial respiration or use a bag-mask respirator. Get immediate medical attention. If victim is having trouble breathing, transport to medical care and, if available, give supplemental oxygen.

**Eye contact:** Rinse eyes with water. Remove any contact lenses, and continue flushing with plenty of water for several minutes. Seek medical attention if irritation develops and persists.

**Ingestion:** Give 3-4 glasses of water, but DO NOT induce vomiting. If vomiting occurs, give fluids again. Get medical attention to determine whether vomiting or evacuation of stomach is necessary. Do not give anything by mouth to an unconscious or convulsing person.

**NOTE TO PHYSICIAN**

None known.

5. **FIRE FIGHTING MEASURES**

Flash Point and Method ............... > 200 °F

**GENERAL HAZARD**

Fire or excessive heat may produce hazardous decomposition products.

**EXTINGUISHING MEDIA**

In case of fire use extinguishing media suitable for the material that is burning.

**SPECIAL FIREFIGHTING INSTRUCTIONS**

None known.

**FIREFIGHTING EQUIPMENT**

As in any fire, wear NIOSH approved, positive-pressure self-contained breathing apparatus and full protective gear.

6. **ACCIDENTAL RELEASE MEASURES**

Wear appropriate protective equipment (See Section 8). Avoid contact with eyes, skin, or clothing. Ventilate area of leak or spill. Absorb with kitty litter, sand or earth and package in a suitable container for disposal.

7. **HANDLING AND STORAGE**

**HANDLING**

Wear appropriate protective equipment (See Section 8). Avoid contact with eyes, skin, or clothing. Wash thoroughly after handling.

**STORAGE**

Keep in a tightly closed container, stored in a cool, dry, ventilated area.

8. **EXPOSURE CONTROLS/PERSONAL PROTECTION**

**ENGINEERING CONTROLS**

Use engineering controls to reduce air contamination to permissible exposure level.

**PERSONAL PROTECTION**

**Respirator:** In conditions where high concentrations of vapors or mist are present or exposure limits are exceeded, wear a respirator that has been selected by technically qualified person for the specific work conditions.

**Eye Protection:** Wear approved safety glasses.

**Gloves:** Butyl rubber.

**Clothing:** Wear long-sleeved clothing. Use rubber apron.

**Other:** Eye wash; safety shower.

9. **PHYSICAL AND CHEMICAL PROPERTIES**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>State</td>
<td>Liquid</td>
</tr>
<tr>
<td>Color</td>
<td>Blue to moss green</td>
</tr>
<tr>
<td>Odor</td>
<td>Sulfur dioxide</td>
</tr>
<tr>
<td>Melting Point °F</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling Point °F</td>
<td>&gt; 212</td>
</tr>
<tr>
<td>Specific Gravity @ 25 °F</td>
<td>1.29</td>
</tr>
</tbody>
</table>
10. STABILITY AND REACTIVITY

REACTIVITY
Stable under normal use conditions. Will decompose in acid solutions, liberating toxic and irritating sulfur dioxide gas.

HAZARDOUS DECOMPOSITION PRODUCTS
CO₂, CO, and oxides of sulfur.

11. TOXICOLOGICAL INFORMATION

The product is not an irritant. The primary dermal irritation score was 0.3 following a 4-hour occluded dermal exposure in a modified FHSA/CPSC Design, 16 CFR 1500.

For Sodium sulfite:
Oral DC₅₀ (rat): 820 mg/kg

For Ethylene glycol:
Inhalation LC₅₀ (rat): 10,876 mg/kg
Oral LD₅₀ (rat): 4,700 mg/kg
Oral LC₅₀ (mouse): 5,500 mg/kg
Dermal LC₅₀ (rabbit): 9,530 µL/kg

Swallowing can cause nausea, vomiting, abdominal pain and weakness, as well as drunkenness, dizziness, stupor, convulsions and coma. Death could result from respiratory arrest or cardiovascular collapse. Kidney damage may result.

Animal studies indicate that repeated ingestion can cause formation of bladder and kidney stones, as well as kidney damage.

12. ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

For Ethylene glycol:
96 hr LC₅₀ (rainbow trout): 41,000 mg/L. Cond: 20 °C.
96 hr LC₅₀ (bluegill): 27,500 - 41,000 mg/L.
96 hr LC₅₀ (goldfish): 27,500 - 41,000 mg/L.
48 hr LC₅₀ (water flea): 46,300 mg/L
30 min EC₅₀ (Photobacterium phosphoreum): 620.0 mg/L Microtox test.

ENVIRONMENTAL MOVEMENT AND PARTITIONING
Not known.

ENVIRONMENTAL FATE
Not known.

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code: . . . . . . . . . . . . . . Not regulated.

14. TRANSPORT INFORMATION

Not regulated by DOT, ICAO, or IMDG.
15. REGULATORY INFORMATION

OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)

- Hazardous
- Non-Hazardous

CERCLA/SUPERFUND (40 CFR 117, 302)

N/A

SARA TOXIC CHEMICALS (40 CFR 372)

Ethylene glycol (2-9%)

SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)

N/A

SARA HAZARD CATEGORIES (40 CFR 370)

- Acute
- Chronic
- Fire
- Pressure
- Reactive
- None

INVENTORY STATUS

All ingredients of this product are on the TSCA inventory.

TSCA CHEMICAL SPECIFIC RULES

None known.

STATE REGULATIONS

California Proposition 65 . . . . Warning! This product contains formaldehyde a chemical known to the State of California to cause cancer.

Florida Hazardous Substance List  Sodium metabisulfite, and ethylene glycol.

Massachusetts Right To Know List . . . . Formaldehyde, sodium metabisulfite, and ethylene glycol

Minnesota Hazardous Substance List . . Sodium metabisulfite, and ethylene glycol

New Jersey Right To Know List . . . . . . . . . . Sodium metabisulfite, and ethylene glycol

Rhode Island Hazardous Substance List: Sodium metabisulfite, and ethylene glycol

16. OTHER INFORMATION

NFPA RATING

Health  2
Fire  1
Reactivity  0

ABBREVIATIONS

C - Ceiling limit
N/A - Not applicable
N/D - Not determined
N/E - Not established
N/K - Not known
NAERG - North American Emergency Response Guidebook
RQ - Reportable Quantity
TPQ - Threshold Planning Quantity

PREPARATION INFORMATION

Prepared by:  Sprint Systems of Photography, Inc.
Date Prepared:  April 19, 2000
Replaces:  November 19, 1999

REVISION INFORMATION

Sections 3, 4, 6, 7, 8, 11, 14 and 16 were updated to reflect results of a dermal irritation study.