1. **PRODUCT AND COMPANY IDENTIFICATION**

**PRODUCT IDENTIFICATION**
- **Product Name**: Record Speed Fixer
- **Catalog Number**: N/A
- **Chemical Name**: Mixture
- **Common Name**: N/A
- **Product Use**: Fixes photographic film and paper.

**MANUFACTURER**
- Sprint Systems of Photography, Inc.
- 100 Dexter Street
- Pawtucket, R.I. 02860
- 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>Ammonium thiosulfate</td>
<td>7783-18-8</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Boric acid</td>
<td>10043-35-3</td>
<td>N/E</td>
<td>N/E</td>
</tr>
<tr>
<td>Acetic acid</td>
<td>64-19-7</td>
<td>10 ppm</td>
<td>10 ppm (TWA) - 15 ppm (STEL)</td>
</tr>
<tr>
<td>Sodium sulfite</td>
<td>7757-83-7</td>
<td>N/E</td>
<td>N/E</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 metaborate</td>
<td>7775-19-1</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**
- Light yellowish liquid with a slight banana odor.
- Warning! Contact may cause sensitization. Breathing acetic acid vapors may cause asthma. May cause life threatening asthma. May cause irritation to the eyes, skin, and respiratory tract.
- In case of fire, extinguishing media 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**: Prolonged or repeated contact may cause irritation, redness, cracking, and dermatitis. Contact may cause sensitization.
- **Inhalation**: Vapors may irritate the respiratory tract. Breathing acetic acid may cause asthma.

**Eye Contact**: Contact of product with eyes may irritate and burn eyes.

**Ingestion**: May cause digestive tract irritation. May cause life threatening asthma.

**MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE**
- Persons sensitized to acetic acid, sodium metabisulfite or sodium sulfites 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, several minutes. Seek medical attention if irritation develops and persists.

Inhalation: Remove from area to fresh air. Seek medical attention if respiratory irritation develops or if breathing becomes difficult. 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
No information available.

5. FIRE FIGHTING MEASURES

Flash Point and Method .............. > 200°F (PMCC)

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 getting on clothing or skin or in eyes. Absorb in kitty litter, dry sand or earth and place into containers for disposal.

7. HANDLING AND STORAGE

HANDLING
Wear appropriate protective equipment (See Section 8). Avoid getting on clothing or skin or in eyes. 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 contaminants to permissible exposure level.

PERSONAL PROTECTION
Respirator: In conditions where high concentrations of vapors 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 or goggles.

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>Light yellowish</td>
</tr>
<tr>
<td>Odor</td>
<td>Slight banana</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>1.35</td>
</tr>
<tr>
<td>Vapor Density (Air = 1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor Pressure (mm Hg)</td>
<td>Negligible</td>
</tr>
<tr>
<td>pH</td>
<td>6.0</td>
</tr>
<tr>
<td>Water Solubility</td>
<td>Soluble</td>
</tr>
<tr>
<td>Solubility in other liquids</td>
<td>N/E</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.

**INCOMPATIBILITIES**
Acidic materials, strong oxidizers, alkali materials.

**HAZARDOUS DECOMPOSITION PRODUCTS**
Ammonia, CO₂, CO, oxides of nitrogen and sulfur, hydrogen sulfide.

**CONDITIONS TO AVOID**
Excessive heat; acids or alkalies.

11. TOXICOLOGICAL INFORMATION

The product is not a skin irritant. The primary dermal irritation score was 0.17 following a 4-hour occluded dermal exposure in a modified FHSA/CPSC Design, 16 CFR 1500.

**For Acetic acid:**
- Inhalation LC₅₀ (mouse): 5,260 ppm/1 hr
- Oral LD₅₀ (rat): 3,310 mg/kg
- Dermal LD₅₀ (rabbit): 1,060 µL/kg

**For Ammonium thiosulfate:**
- Oral LD₅₀ (rat): 2,890 mg/kg
- Oral LD₅₀ (mouse): 2,100 mg/kg

**For Sodium sulfite:**
- Oral LD₅₀ (mouse): 820 mg/kg

**For Sodium metaborate:**
- Oral LD₅₀ (rat): 2,330 mg/kg

**For Boric acid:**
- Oral LD₅₀ (rat): 2,660 mg/kg
- Oral LD₅₀ (mouse): 3,450 mg/kg

A human study of an occupationally exposed borate worker population showed no adverse reproductive effects. Animal studies of similar inorganic borates demonstrated reproductive effects in males.

12. ECOLOGICAL INFORMATION

**ECOTOXICOLOGICAL INFORMATION**

**For Acetic acid:**
- 96 hr LC₅₀ (fathead minnow): 88 mg/L. Cond: Static, 18-22°C;
- 96 hr LC₅₀ (bluegill sunfish): 75 mg/L
- 24 hr LC₅₀ (goldfish): 423 mg/L;
- 24-48 hr EC₅₀ (water flea): 32-47 mg/L;
- 5, 15, 25 min) EC₅₀ (Photobacterium phosphoreum): 8.86-11 mg/L. Microtox test. Cond: 15°C.

**For Boric acid:**
- 48 hr LC₅₀ (water flea): 115.0-153.0 mg/L. Cond: Static.

**ENVIRONMENTAL MOVEMENT AND PARTITIONING**
Not known.

**ENVIRONMENTAL FATE**
Not known.

13. DISPOSAL CONSIDERATIONS

RCRA Waste Code: Not regulated
14 TRANSPORT INFORMATION

DOT Proper Shipping Name  . . . . . . . . . . . . Not regulated

15. REGULATORY INFORMATION

**OSHA HAZARD COMMUNICATION STANDARD (29 CFR 1910.1200)**
- ✔ Hazardous
- _ Non-Hazardous

**CERCLA/SUPERFUND (40 CFR 117, 302)**
Acetic acid - RQ: 5,000 lbs.

**SARA TOXIC CHEMICALS (40 CFR 372)**
N/A

**TSCA CHEMICAL SPECIFIC RULES**
N/A

**INVENTORY STATUS**
All ingredients of this product are on the TSCA inventory.

**SARA EXTREMELY HAZARDOUS SUBSTANCES (40 CFR 355)**
N/A

**SARA HAZARD CATEGORIES (40 CFR 370)**
- ✔ Acute
- ✔ Chronic
- _ Fire
- _ Pressure
- _ Reactive
- _ None

**STATE REGULATIONS**
- Florida Hazardous Substance List ... Acetic acid and sodium metabisulfite
- Massachusetts Right To Know List ... Acetic acid and, ammonium thiosulfate, and sodium metabisulfite
- Minnesota Hazardous Substance List ... Acetic acid and sodium metabisulfite
- New Jersey Right To Know List ... Acetic acid and, ammonium thiosulfate, and sodium metabisulfite
- Rhode Island Hazardous Substance List ... Acetic acid, Sodium metabisulfite

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: June 21, 2000
- Replaces: November 10, 1999

**REVISION INFORMATION**
Sections 11 and 16 were updated to reflect results of a dermal irritation study.