**EFFECTS OF ACUTE EXPOSURE TO PRODUCT**

Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes. May cause mild skin irritation and/or allergic reaction. Prolonged inhalation of vapors may be irritating and may cause headaches.

**EFFECTS OF CHRONIC EXPOSURE TO PRODUCT**

None known.

**SKIN CONTACT**

Wash exposed skin thoroughly with soap and water. If irritation persists seek medical advice.

**EYE CONTACT**

Flush eyes with water for 15 minutes. Seek medical advice if symptoms persist.

**INGESTION**

Acidic solution. DO NOT induce vomiting. Seek medical attention immediately.

**INHALATION**

If inhaled, remove to fresh air.

---

**SECTION 2 - Product and Hazardous Ingredients Information**

<table>
<thead>
<tr>
<th>HAZARDOUS INGREDIENTS</th>
<th>CAS NUMBER</th>
<th>W/W %</th>
<th>Permissible Exposure Limit</th>
<th>LD50</th>
<th>LC50</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>90-95</td>
<td>not listed</td>
<td>42.6 gm/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Ammonium thiosulfate</td>
<td>7783-18-8</td>
<td>5-10</td>
<td>not listed</td>
<td>2890 mg/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Sodium sulfite</td>
<td>7757-83-7</td>
<td>1-2</td>
<td>not listed</td>
<td>2825 mg/kg</td>
<td>not available</td>
</tr>
</tbody>
</table>

---

**SECTION 3 - Hazards Identification**

**EFFECTS OF ACUTE EXPOSURE TO PRODUCT**

Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes. May cause mild skin irritation and/or allergic reaction. Prolonged inhalation of vapors may be irritating and may cause headaches.

**EFFECTS OF CHRONIC EXPOSURE TO PRODUCT**

None known.

---

**SECTION 4 - First Aid Measures**

**SKIN CONTACT**

Wash exposed skin thoroughly with soap and water. If irritation persists seek medical advice.

**EYE CONTACT**

Flush eyes with water for 15 minutes. Seek medical advice if symptoms persist.

**INGESTION**

Acidic solution. DO NOT induce vomiting. Seek medical attention immediately.

**INHALATION**

If inhaled, remove to fresh air.

---

**SECTION 5 - Fire Fighting Measures**

**MEANS OF EXTINCTION**

As needed to extinguish adjacent fire source.

**EXPLOSION DATA**

Not susceptible

**SENSITIVITY TO IMPACT**

Not susceptible

**SENSITIVITY TO STATIC DISCHARGE**

Not susceptible

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**SECTION 6 - Accidental Release**

Flush to sewer with plenty of water, if permitted. If not, soak up with dry absorbent material. Consult with governmental regulatory agencies for appropriate disposal of this material. Wear appropriate protective equipment.

---

**SECTION 7 - Handling and Storage**

Read and follow the label, material safety data sheet, and instructions before using. Avoid any contact with skin and eyes. Keep container tightly closed. Avoid incompatible substances. Wash thoroughly after handling this product.
MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME
Cine/ Manual Fixers, Concentrate

PRODUCT USE
Photographic fixer

SUPPLIER
White Mountain Imaging

ADDRESS
P.O. Box 216 Salisbury NH 03268

PHONE NO.
603-648-2124

EMERGENCY TEL #
CHEMTREC 800-424-9300

SECTION 2 - Product and Hazardous Ingredients Information

<table>
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</thead>
<tbody>
<tr>
<td>Water</td>
<td>7732-18-5</td>
<td>40-50</td>
<td>not listed</td>
<td>42.6 gm/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Ammonium thiosulfate</td>
<td>7783-18-8</td>
<td>40-50</td>
<td>not listed</td>
<td>2890 mg/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Sodium sulfite</td>
<td>7757-83-7</td>
<td>4-8</td>
<td>not listed</td>
<td>2825 mg/kg</td>
<td>not available</td>
</tr>
<tr>
<td>Aluminum sulfate</td>
<td>10043-01-3</td>
<td>1-3</td>
<td>ACGIH TWA 2mg/m3</td>
<td>6201 mg/kg</td>
<td>not available</td>
</tr>
</tbody>
</table>

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT
Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes. May cause mild skin irritation and/or allergic reaction. Prolonged inhalation of vapors may be irritating and may cause headaches.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT
None known.

SECTION 4 - First Aid Measures

SKIN CONTACT
Wash exposed skin thoroughly with soap and water. If irritation persists seek medical advice.

EYE CONTACT
Flush eyes with water for 15 minutes. Seek medical advice if symptoms persist.

INGESTION
DO NOT induce vomiting. Seek medical attention immediately.

INHALATION
If inhaled, remove to fresh air.

SECTION 5 - Fire Fighting Measures

FLAMMABILITY
X

MEANS OF EXTINCTION
As needed to extinguish adjacent fire source.

FLASHPOINT (°C) AND METHOD
Not appropriate

LOWER FLAMMABLE LIMIT (% BY VOLUME)
Not appropriate

Hazardous Combustion Products
See "Hazardous Decomposition Products".

SECTION 6 - Accidental Release

Flush to sewer with plenty of water, if permitted. If not, soak up with dry absorbent material. Consult with governmental regulatory agencies for appropriate disposal of this material. Wear appropriate protective equipment.

SECTION 7 - Handling and Storage

Read and follow the label, material safety data sheet, and instructions before using. Avoid any contact with skin and eyes. Keep container tightly closed. Avoid incompatible substances. Wash thoroughly after handling this product.
SECTION 8 - Exposure Controls

VENTILATION: Good general ventilation.

SKIN: Latex or nitrile

EYE: Splash goggles

RESPIRATORY: Not normally required

OTHER: Eye wash station

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE: Liquid

ODOR AND APPEARANCE: Clear liquid with a slight ammonia odor

ODOR THRESHOLD: Not available

VAPOUR PRESSURE (mm Hg): <17

VAPOUR DENSITY (Air = 1): 0.6

EVAPORATION RATE (Water = 1): 1

BOILING POINT (°C): ≥ 212

FREEZING POINT (°C): ≤ 32

pH: 5.0

SPECIFIC GRAVITY: 1.265

SOLUBILITY IN WATER (20°C): Complete

COEFF WATER OIL: Not available

PERCENT VOLATILE (BY VOLUME): 95%

SECTION 10 - Stability and Reactivity Data

CHEMICAL STABILITY: Yes

If No, Under What Conditions: X

INCOMPATIBILITY WITH OTHER SUBSTANCES: Yes

If Yes, Which Ones?: Strong reducing agents, bromide-based water cleaners

REACTIVITY, AND UNDER WHAT CONDITIONS: Stable under ambient pressure and temperature.

HAZARDOUS DECOMPOSITION PRODUCTS: SO₂

SECTION 11 - Toxicological Information

EXPOSURE LIMITS: None known

IRRITANCY OF PRODUCT: None known

SENSITIZATION TO PRODUCT: None known

CARCINOGENICITY: Not listed by IARC, OSHA or ACGIH.

TERATOGENICITY: Not known

REPRODUCTIVE TOXICITY: Not known

MUTAGENICITY: Not known

SYNERGISTIC PRODUCTS: Not known

SECTION 12 - Ecological Information

No data available

SECTION 13 - Disposal Considerations

Dispose of this product in accordance with federal, state and/or local laws.

SECTION 14 - Transportation Information

Not regulated for transportation.

SECTION 15 - Regulatory Information

SARA: Reportable quantity (RQ) for Ammonium Thiosulfate 5000 lb
SARA Section 304, CERCLA Hazardous components - Ammonium Thiosulfate
SARA Section 302, 304, 313 Hazardous components (None)

SECTION 16 - Other Information

The information contained in this MSDS is furnished without warranty of any kind. The user should consider this data a supplement to other data gathered and must make an independent determination of suitability from this and other sources to assure proper use and disposal of this material and the health and safety of employees and customers.
SECTION 8 - Exposure Controls

VENTILATION Good general ventilation.

SKIN Latex or nitrile

EYE Splash goggles

RESPIRATORY Not normally required

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE Liquid

ODOR AND APPEARANCE Clear colorless liquid with a slight ammonia odor

ODOR THRESHOLD Not available

VAPOUR PRESSURE (mm Hg) < 17 mm Hg

VAPOUR DENSITY (Air = 1) 0.6 mm Hg

EVAPORATION RATE (Water = 1) Not available

BOILING POINT (°C) ≥ 212°F

FREEZING POINT (°C) ≤ 32°F

pH 4.80

SPECIFIC GRAVITY 1.060

SOLUBILITY IN WATER (20°C) Complete

COEFFICIENTS WATER-OIL Not available

PERCENT VOLATILE (BY VOLUME) 50%

SECTION 10 - Stability and Reactivity Data

CHEMICAL STABILITY X NO

IF NO, UNDER WHAT CONDITIONS

INCOMPATIBILITY WITH OTHER SUBSTANCES X NO

IF YES, WHICH ONES? Strong reducing agents and bleaching agents

REACTIVITY, AND UNDER WHAT CONDITIONS Stable under ambient pressure and temperature.

HAZARDOUS DECOMPOSITION PRODUCTS CO₂, CO

SECTION 11 - Toxicological Information

EXPOSURE LIMITS None known

IRRITANCY OF PRODUCT None known

SENSITIZATION TO PRODUCT None known

CARCINOGENICITY Not listed by IARC, OSHA or ACGIH.

TERATOGENICITY Not known

REPRODUCTIVE TOXICITY Not known

MUTAGENICITY Not known

SYNERGISTIC PRODUCTS Not known

SECTION 12 - Ecological Information

No data available

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Dispose of this product in accordance with federal, state and/or local laws.

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