



Material Safety Data Sheet

#M-23007

SECTION I - General Information

Product Name: Autex[®] Manual Fixer Replenisher Concentrate
Catalog No. 23007

Chemical Family:
Photographic Fixer

Formula:
Aqueous Mixture

Proper D.O.T. Shipping Name:
Not Regulated

D.O.T. Hazard Classification:
Not Applicable

Manufacturer:
ALLIED Diagnostic Imaging Resources, Inc.
5440 Oakbrook Parkway
Norcross, GA 30093

Manufacturer's Phone Number:
(770) 448-0250

CHEMTREC Phone Number:
(800) 424-9300

SECTION II - Product and Hazardous Ingredients Information

<u>Item</u>	<u>CAS#</u>	<u>PERCENT</u>	<u>EXPOSURE LIMITS</u>	<u>SARA RO/TPQ</u>	
Ammonium Thiosulfate	7783-18-8	30-35	N/A	N/A	N/A
Sodium Sulfite	7757-83-7	1-5	N/A	N/A	N/A
Sodium Tetraborate	1303-96-4	1-5	5 mg/m ³ TLV	N/A	N/A
Acetic Acid	64-19-7	1-5	10 ppm PEL (STEL 15 ppm)	5000#	N/A
Aluminum Sulfate	10043-01-3	1-5	2mg/m ³ (as Al) TLV	5000#	N/A
Water	7732-18-5	45-55	N/A	N/A	N/A

SECTION III - Physical Data

Boiling Point: >212° F.
Vapor Pressure (mmHg): 17.0
Vapor Density (mmHg): 0.6
Solubility in Water: Complete
Appearance and Odor: Clear, slight vinegar odor

Specific Gravity: 1.25

Percent Volatile by Weight: 40%

Evaporation Rate: N/A

pH: 4.95

SECTION IV - Fire and Explosion Hazard Data

Flash Point: None
Extinguishing Media: Use method appropriate for surrounding fire.
Special Fire Fighting Procedures: Use protective clothing to prevent contact with skin and eyes.
Unusual Fire and Explosions Hazards: When heated to decomposition, it can emit toxic fumes of SO₂ and ammonia.
IDLH Ammonia – 500 ppm

SECTION V - Health Hazard Data

TLV (ACGIH): Acetic Acid (25mg/m³), Aluminum Sulfate (2mg/m³-as Al).

Short-Term Exposure Limit (STEL): Acetic Acid (15 ppm)

Effects of Overexposure:

Inhalation: Low hazard for ordinary industrial handling. Contact with strong acids, or if heated, sulfites may liberate sulfur dioxide gas. Sulfur dioxide gas can irritate the respiratory tract. Some asthmatics or hypersensitive individuals may experience difficult breathing.

Eyes: Vapor may cause irritation. Contact may cause burns.

Skin: Repeated and prolonged contact may cause irritation.

Ingestion: Do **Not** take internally. May be harmful if swallowed. Sulfite sensitive individuals may experience chest wheezing, chest tightness, upset stomach and weakness.



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Pure Component Toxicology Information:

Ammonium Thiosulfate: Ammonium thiosulfate is considered to have a low toxicity to humans by ingestion. Inhalation of mist may cause irritation of the nose, throat and respiratory tract. Contact with eyes may cause irritation or a burning sensation. Prolonged or repeated contact with skin may cause irritation.

Acetic Acid: Acetic acid is a skin and eye corrosive. Vapor irritates the eyes and respiratory system. Ingestion causes internal irritation and damage. The compound has been infrequently associated with skin sensitization in humans.

Sodium Sulfite: Slightly toxic by oral ingestion. It is a slight to moderate skin, eye, and respiratory tract irritant. Some asthmatics or sulfite-sensitive individuals may experience wheezing, chest tightness, hives, weakness and diarrhea following ingestion.

Aluminum Sulfate: Can cause oral and gastrointestinal irritation if swallowed. Nausea, vomiting, and diarrhea may occur. Skin contact will cause irritation. Long term exposure to skin by concentrated solutions will cause irritation. Prolonged contact with dilute solutions may cause irritation.

Evidence of Carcinogen: N/A

Teratogenicity: N/A

Reproductive Toxicity: N/A

Mutagenicity: Sodium Sulfite, Sodium Tetraborate

Synergistic Products: N/A

Emergency First Aid Procedures:

Skin: Wash skin with soap and water. If irritation occurs, seek medical attention.

Eyes: Flush with large amount of water for 15 minutes. Seek medical attention.

Ingestion: Drink water to dilute concentration. Induce vomiting only as directed by medical personnel. Seek medical attention immediately giving full details of amount ingested and toxicity.

Inhalation: Move to fresh air. Treat symptomatically.

SECTION VI - Reactivity Data

Stability: Stable.

Incompatibility: Strong bases, strong acids.

Hazardous Decomposition Products: When heated to decomposition, it can emit toxic fumes of SO₂ and ammonia. Contact with strong acids may release Sulfur Dioxide. Contact with strong bases may release ammonia.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: None known.

SECTION VII - Spill or Leak Procedures

Steps to be Taken in Case Material is Released or Spilled: Wear protective clothing as specified in Section VIII. Neutralize with sodium bicarbonate. If federal, state and local laws permit, flush to sewer with large amounts of water.

Waste Disposal: Neutralize with sodium bicarbonate. If federal, state, and/or local laws permit, flush to sewer with large amounts of water. Otherwise, dispose of contaminated product and materials used in cleaning up the spill in a manner approved for this material. Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

SECTION VIII -Special Protection Information:

Respiratory Protection (Specify Type): Should not be necessary under normal conditions. If exposed to vapors that exceed TLV or PEL, wear approved vapor respirator.

Protective Equipment:

Gloves: Impervious gloves.

Eyes: Wear protective goggles.

Other: As necessary to prevent skin contact. Eyewash facilities in vicinity of use.

SECTION IX -Special Precautions

Precautions to be Taken in Handling and Storage: Do not store or consume food, drink or tobacco in surrounding area. Keep away from alkalis, amines, alcohols, and strong oxidizers. Wash thoroughly after handling.



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The information contained in this material safety data sheet is furnished without warranty of any kind. The user should consider this data a supplement to other information gathered and must make independent determination of suitability and completeness of information from this and other sources to assure proper use and disposal of the materials and the health and safety of employees and customers. This statement is incorporated as part of this Material Safety Data Sheet.

Revised: April 20, 2005