



Material Safety Data Sheet

#M-A2

SECTION I - General Information

Product Name: Autex® A2 Developer/Replenisher Concentrate

Chemical Family:
Photographic Developer

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>(Part A)</u>	<u>CAS#</u>	<u>PERCENT by weight</u>	<u>OSHA PEL (TWA)</u>	<u>SARA RO/TPQ</u>
Potassium Hydroxide	1310-58-3	1-5	2 mg/m ³	1000 # NA
Sodium Sulfite	7757-83-7	5-10	N/A	
Potassium Sulfite	10117-38-1	5-10	N/A	
Sodium Carbonate	497-19-8	1-5	N/A	
Hydroquinone	123-31-9	5-10	2mg/m ³	100 # 500#
4-Methyl-1-Phenyl-3-Pyrazolidone	2654-57-1	< 1	N/A	
Diethylene Glycol	111-46-6	1-5	N/A	
Water	7732-18-5	45-60	N/A	
<u>(Part B)</u>				
Sodium Glutaraldehyde Bisulfite	7420-89-5	20 – 25 %	NA	
Citric Acid	77-92-9	1-5	NA	
Water	7732-18-5	70-80	N/A	

SECTION III - Physical Data

Boiling Point: >212° F.-Part A&B

Vapor Pressure (mmHg): Part A&B-17.0

Solubility in Water: Complete

pH: Part A-11.0, Part B-2.05

Specific Gravity: Part A- 1.285, Part B-1.14

Percent Volatile by Weight: Part A – 64%, Part B – 75%

Appearance and Odor: Part A- Pale yellow; odorless. Part B- Clear; odorless

SECTION IV - Fire and Explosion Hazard Data

Parts A & B

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. Wear a self contained breathing apparatus to protect from hazardous decomposition products.

Unusual Fire and Explosions Hazards: None known



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SECTION V - Health Hazard Data

PART A:

Pure Component Toxicology Information

Hydroquinone: Moderately toxic by oral ingestion. It is a skin and eye irritant and may cause an allergic reaction in sensitive individuals. Hydroquinone also may cause brown staining of the conjunctiva following prolonged direct eye contact with the solid and may depigment the skin following repeated skin contact under some circumstances. Hydroquinone is a CNS stimulant based on animal studies. Although Hydroquinone is not listed as a human carcinogen, it has caused cancer in some animal studies.

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.

4-Methyl-1-Phenyl-3-Pyrazolidone: This compound is an eye irritant. Ingestion of large doses may cause red blood cell destruction and anemia, and liver, kidney, spleen or testicular abnormalities.

Diethylene Glycol: Inhalation of diethylene glycol vapors is unlikely due to its low vapor pressure. However, if misted or handled at elevated temperatures, high concentrations of diethylene glycol can produce drowsiness, headache, dizziness, and nausea. Ingestion of diethylene glycol can result in behavioral change, drowsiness, kidney and liver failure, and coma. The oral toxicity of diethylene glycol is greater in humans than in laboratory animals. The estimated single lethal dose-oral-human is 1.0 ml/kg.

Medical Conditions Aggravated by Exposure: Persons with preexisting eye, skin, liver, or kidney conditions or impaired pulmonary function may be more susceptible to the effects of this product.

Carcinogenicity Information: None of the components present in this material at concentrations equal to or greater than 0.1 % are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Effects of Overexposure:

Primary route(s) of entry: Skin contact.

Inhalation: Low hazard for ordinary industrial handling.

Eyes: Contact may cause burns.

Skin: Repeated and prolonged contact may cause irritation and burns.

Ingestion: Do Not take internally. Harmful if swallowed.

PART B:

Pure Component Toxicology Information

Citric Acid: Inhalation or ingestion may cause gastrointestinal irritation with nausea, vomiting and diarrhea. Citric acid decreases iron and calcium absorption. Contact with eyes and skin may cause irritation, and possible eye burns. May cause skin irritation.

Medical Conditions Aggravated by Exposure: None known.

Carcinogenicity Information: None of the components present in this material at concentrations equal to or greater than 0.1 % are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

Effects of Overexposure:

Primary route(s) of entry: Skin contact.

Inhalation: Low hazard for ordinary industrial handling.

Eyes: Contact may cause burns.

Skin: Repeated and prolonged contact may cause irritation and burns.

Ingestion: Do Not take internally. Harmful if swallowed.

Evidence of:



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Carcinogen: Hydroquinone
Teratogenicity: N/A
Reproductive Toxicity: N/A
Mutagenicity: Sodium Sulfite, Hydroquinone
Synergistic Products: N/A

Emergency First Aid Procedures:

Inhalation: If inhaled, move victim to fresh air.

Eyes: If in contact with eyes, immediately flush eyes with running water, holding eye lids open, for at least 15 minutes. Seek medical attention.

Skin: For skin contact, wash with soap and water while removing contaminated clothing. Launder contaminated clothing before re-use.

Ingestion:Part A - If ingested, induce vomiting as directed by medical personnel. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately.

Part B – If ingested, do NOT induce vomiting. Call a physician or poison control center immediately.

SECTION VI - Reactivity Data

Stability: Stable.

Incompatibility: Strong acids, strong bases, amines, alcohols and strong oxidizers.

Hazardous Decomposition Products: sulfur dioxide, carbon monoxide, carbon dioxide.

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: 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 airborne concentrations that exceed the 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. Do not store near strong acids or bases. Wash thoroughly after use.

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 25, 2005