



5440 Oakbrook Parkway
 Norcross, GA 30093-2251
 PHONE: (770) 448-0250 / FAX: (770) 448-0257

Catalog #:

23314

Description:

Autex® HD Developer Replenisher (Parts A, B and C)

Data:



Material Safety Data Sheet #M-23314

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SECTION I - General Information

Product Name: Autex® HD Developer Replenisher (Parts A, B and C)

Catalog No. 23314

Application: Photographic Developer **Formula:** Aqueous Mixture, see below

D.O.T. Shipping Information:

Part B

Proper Shipping Name Acetic Acid Solution

Hazard Class 8

UN I.D. Number UN 2790

Packing Group III

Manufacturer: Manufacturer's Phone Number:

ALLIED Diagnostic Imaging Resources, Inc. (770) 448-0250

5440 Oakbrook Parkway

Norcross, GA 30093 Emergency Telephone Number:

(800) 424-9300 (Chemtrec)

SECTION II – Product Hazardous Ingredient Information

ITEM CAS# CONCENTRATION (%) EXPOSURE LIMITS

#9621 (Part A)

Water 7732-18-5 60-65 Not established

Potassium Sulfite 10117-38-1 15-20 Not established

Potassium Carbonate 584-08-7 5-10 Not established

Diethylene Glycol 111-46-6 5-10 Not established

*Hydroquinone 123-31-9 5-10 2mg/m³ PEL (TWA)

*** Disclosure as a toxic chemical is required under Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR part 372.**

#9622 (Part B)

Acetic Acid 64-19-7 30-35 10 ppm, PEL (TWA) Diethylene Glycol 111-46-6 65-70 Not established
1-Phenyl-3-Pyrazolidone 92-43-3 5-10 Not established

#9523 (Part C)

Water 7732-18-5 45-50 Not established
Potassium glutaraldehyde 68310-08-7 50-55 Not established
bisulfite

SECTION III - Physical Data Part A Part B Part C

Odor Odorless Vinegar Odorless
Form Liquid Liquid Liquid
Color Light Yellow Amber Yellowish
Boiling Point Approx. 212 F (100 C) Greater than 212 F (100 C) Greater than 212 F (100 C)
pH Approx. 11.8 Approx. 2.7 Not Established
Solubility in Water soluble soluble soluble
Specific Gravity Approx. 1.35 Approx. 1.11 Approx. 1.24

SECTION IV - Fire and Explosion Hazard Data

Parts A & C

Flammable Properties: Material is not combustible.

Extinguishing Media: Use any available extinguishing media.

Special Fire Fighting Procedures: Normal firefighting measures include the following. Keep personnel removed

and upwind of fire. Wear self-contained breathing apparatus. Wear full protective equipment. Fire or excessive heat may produce hazardous decomposition products.
When heated to decomposition emission of toxic fumes of SO₂ is possible for parts A and C.

Part B

Flammable Properties: Flash Point: Greater than 2000 F (930 C)

Material is not combustible.

Extinguishing Media: Use any available extinguishing media.

Special Fire Fighting Procedures: Normal firefighting measures include the following. Keep personnel removed and upwind of fire. Wear self-contained breathing apparatus. Wear full

protective equipment. Fire or excessive heat may produce hazardous decomposition products.

SECTION V - Health Hazard Data

THIS PRODUCT CAN BE SAFELY USED WHEN APPLICABLE SAFETY PRECAUTIONS ARE FOLLOWED.

Part A Potential Effects of Overexposure

Inhalation: Product expected to be irritating to the respiratory tract with symptoms of coughing, sore throat,

and runny nose.

Eye Contact: Product can be irritating to the eyes with symptoms of tearing, stinging, reddening, and swelling. Contact may cause burns.

Skin Contact: Product can be irritating to the skin with symptoms of reddening, itching, and swelling.

Ingestion: Irritating to gastrointestinal tract. May cause vomiting and diarrhea. Some asthmatics or sulfite sensitive individuals may experience wheezing, chest tightness, hives, weakness, and diarrhea following ingestion.

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.

Potassium Carbonate: Slightly toxic by oral ingestion. It is a moderate to strong skin, eye, and respiratory tract irritant.

Potassium 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.

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.

Part B Potential Effects of Overexposure

Inhalation: Vapor may cause severe irritation to nose and throat. May cause difficulty breathing.

Eye Contact: Vapor may cause irritation. Contact can cause severe irritation and burns.

Skin Contact: Repeated and prolonged contact may cause irritation and burns. May cause allergic skin reaction in sensitive individuals.

Ingestion: Harmful if swallowed. May cause severe injury to the upper respiratory tract.

Pure Component Toxicology Information

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.

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.

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.

Medical Conditions Aggravated by Exposure: Persons with preexisting eye, skin or respiratory tract disorders 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.

Part C Potential Effects of Overexposure

Inhalation: Vapor may cause severe irritation to nose and throat. May cause difficulty breathing.

Eye Contact: Due to the pH of the product, it is expected to be irritating to the eyes resulting in reddening, stinging and swelling.

Skin Contact: Due to the pH of the product, it is expected to be irritating to the skin resulting in reddening, stinging and swelling.

Ingestion: May be harmful if swallowed.

Pure Component Toxicology Information

Potassium Glutaraldehyde Bisulfite: No animal toxicity information available.

Medical Conditions Aggravated by Exposure: Persons with preexisting eye, skin, 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.

SECTION VI. - Emergency First Aid Procedures:

Skin: Parts A, B & C - Thoroughly wash exposed area with soap and water. Remove contaminated clothing. Launder contaminated clothing before re-use. Call a physician if irritation persists.

Eyes: Parts A, B & C - Immediately flush with water for 15 minutes, lifting upper and lower lids occasionally. Get medical attention.

Inhalation: Parts A, B & C - Move to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Parts A, B & C - All cases of ingestion should be referred immediately to a physician or Poison Control Center.

SECTION VII - Reactivity Data

Stability: Parts A, B & C – Stable Material

Incompatibility: Part A - Incompatible with strong acids and oxidizers.

Part B – Strong alkali, oxidizers, metals

Part C – Strong bases, oxidizers

Decomposition: Part A –In case of fire, oxides of sulfur, CO₂, carbon monoxide and other potentially toxic fumes.

Part B- In case of fire, oxides of CO₂, carbon monoxide and other potentially toxic fumes can be generated due to thermal decomposition.

Part C –In case of fire, oxides of sulfur, CO₂, carbon monoxide and other potentially toxic fumes.

Hazardous Polymerization: Parts A, B & C - Will not occur.

SECTION VIII - Spill or Leak Procedures**Steps to be Taken in Case Material is Released or Spilled:**

Part A - Wear appropriate protective equipment - see Section IX. Soak up with sawdust, sand oil dry or other absorbent material. Spills may be neutralized with powdered Citric Acid.

Parts B & C - Wear appropriate protective equipment - see Section IX. Dike spill. Prevent liquid from entering sewers, waterways, or low areas. Soak up with sawdust, sand, oil dry or other absorbent material. Spill may be neutralized with powdered Sodium Carbonate.

Waste Disposal: Parts A, B & C –Consult proper federal, state and/or local regulatory agencies to ascertain proper disposal procedures.

SECTION IX -Special Protection Information:

Respiratory Protection: Parts A, B & C - Use sufficient ventilation to keep employee exposure below recommended limits (see Section II). Respirators should not be needed under normal use conditions. A NIOSH / MSHA approved air purifying respirator with organic vapor with dust/mist prefilter cartridge may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits. For an uncontrolled release, where exposure levels are not known, use a positive pressure air supplied respirator.

Eye and Face Protection: Parts A, B & C - Chemical splash goggles. Where spraying or splashing is possible, use a face shield.

Other Protection: Parts A, B & C - For skin protection, use chemical resistant gloves and aprons, and other protective clothing as necessary to prevent skin contact. Have eyewash facilities available in the vicinity of use.

SECTION X -Special Precautions

Precautions to be Taken in Handling and Storage: Avoid eye and skin contact, and store in well ventilated area. Keep container tightly closed. Do not store with incompatible materials. Do not store or consume food, drink or tobacco in surrounding area. Wash thoroughly after use.

Store between 40 F (4.4 C) and 80 F (26 C). Preferred storage is at 68 F (20 C).

OTHER INFORMATION XI- HMIS Ratings

Health Flammability Reactivity Personal Protection

Part A 2 0 0 B

Part B 3 0 0 B

Part C 1 0 0 B

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

B=Safety Glasses, Gloves

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.

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MSDS Rev Dt:

MSDS Attachment: