

## SAFETY DATA SHEETS

**This SDS packet was issued with item:**

077657083

N/A



## Material Safety Data Sheet

### #D-27270 – Part A

#### SECTION I - General Information

**Product Name:** REDI-CHEM®Dental A Developer  
**Catalog No.** 27270 – Part A

**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, 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 #3905</u>	<u>CAS#</u>	<u>PERCENT</u>	<u>PEL (TWA)</u>	<u>SARA</u>	
				<u>RQ/TPQ</u>	
Potassium Sulfite	10117-38-1	1-5	N/A	N/A	N/A
Sodium Sulfite	7757-83-7	1-5	N/A	N/A	N/A
Hydroquinone	123-31-9	1-5	2 mg/m3	1#	500#
Sodium Carbonate	497-19-8	1-5	N/A	N/A	N/A
Water	7732-18-5	90-95	N/A	N/A	N/A

Contains less than 0.05% Nitrotriacetic acid, trisodium salt (CAS# 5064-31-3). The International Agency for Research on Cancer (IARC) lists Nitrotriacetic acid, trisodium salt as Group 2B (Possible Carcinogen). Carcinogens present on 0.1% or more are required to be listed on Material Safety Data Sheets.

#### 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:** Pale yellow, odorless

**Specific Gravity:** 1.075  
**Percent Volatile by Weight:** 95%  
**Evaporation Rate:** N/A  
**pH:** 10.20

#### 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 SO<sub>2</sub>, CO<sub>2</sub>, and possibly CO.

#### SECTION V - Health Hazard Data TLV (ACGIH): Hydroquinone (2 mg/m3)

##### Effects of Overexposure:

**Inhalation:** Low hazard for ordinary industrial handling.  
**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.

##### 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.



## Material Safety Data Sheet

### #D-27270 – Part A

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 and 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.

**Sodium Carbonate:** Dusts and concentrated solutions would probably cause moderate to severe eye irritation. Respiratory irritant. Ingestion may result in irritation of the mouth, throat and stomach due to the irritating nature of sodium carbonate.

#### **Evidence of:**

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

#### **Emergency First Aid Procedures:**

**Eyes:** Flush with large amounts of water for 15 minutes. Seek medical attention.  
**Skin:** Wash skin with soap and water. If irritation occurs, seek medical attention.  
**Ingestion:** 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.

#### **SECTION VI - Reactivity Data**

**Stability:** Stable.  
**Incompatibility:** Strong acids, strong bases.  
**Hazardous Decomposition Products:** When heated to decomposition, it can emit toxic fumes of SO<sub>2</sub>, CO<sub>2</sub> and possibly CO.  
**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.

**Ventilation:** Good local mechanical ventilation should be sufficient.

#### **Protective Equipment:**

**Gloves:** Impervious gloves.  
**Eyes:** Wear protective goggles.  
**Other:** As necessary to prevent skin contact. Eyewash facilities in vicinity of use.





## Material Safety Data Sheet

### #D-27270 – Part A

#### **SECTION IX – Regulatory Information**

U.S. California Prop 65: none

#### **Carcinogenicity Classification (components present at 0.1% or more):**

The International Agency for Research on Cancer (IARC):

Sodium Sulfite: 3 (Classification not possible from current data)

Potassium Sulfite: 3 (not classifiable as to carcinogenicity to humans)

Hydroquinone: 3 (not classifiable as a carcinogen)

**NOTE:** Contains less than 0.05% Nitrilotriacetic acid, trisodium salt (CAS# 5064-31-3). The International Agency for Research on Cancer (IARC) lists Nitrilotriacetic acid, trisodium salt as Group 2B (Possible Carcinogen).

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none

#### **SECTION X – 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 handling.

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: 3/27/08**



## Material Safety Data Sheet

### #D-27270 – Part B

#### SECTION I - General Information

**Product Name:** REDI-CHEM® Dental B Fixer  
**Catalog No.** 27270 – Part B

**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, 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 #4005</u>	<u>CAS#</u>	<u>PERCENT</u>	<u>PEL (TWA)</u>	<u>SARA</u>	
				<u>RO</u>	<u>TPO</u>
Ammonium Thiosulfate	7783-18-8	10-15	N/A	N/A	N/A
Sodium Sulfite	7757-83-7	1-2	N/A	N/A	N/A
Acetic Acid	64-19-7	1-3	10 ppm (STEL 15 ppm)	5000#	N/A
Water	7732-18-5	80-85	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:** 1.085  
**Percent Volatile by Weight:** 90%  
**Evaporation Rate:** N/A  
**pH:** 4.40

#### 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 irritating toxic fumes, i.e. ammonia, oxides of sulfur and nitrogen. IDLH Ammonia – 500 ppm

#### SECTION V - Health Hazard Data TLV (ACGIH): Acetic Acid (25 mg/m3)

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

#### 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.

#### 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.





## Material Safety Data Sheet

### #D-27270 – Part B

**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 wheezing, chest tightness, upset stomach and weakness.

#### Evidence of:

**Carcinogen:** N/A

**Teratogenicity:** N/A

**Reproductive Toxicity:** N/A

**Mutagenicity:** Sodium Sulfite

**Synergistic Products:** N/A

#### Emergency First Aid Procedures:

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

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

**Ingestion:** 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 acids, strong bases.

**Hazardous Decomposition Products:** When heated to decomposition, it can emit toxic fumes of SO<sub>2</sub> and ammonia. 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.

**Ventilation:** Good local mechanical ventilation should be sufficient.

#### Protective Equipment:

**Gloves:** Impervious gloves.

**Eyes:** Wear protective goggles.

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

#### SECTION IX - Regulatory Information

**U.S. California Prop 65:** none

#### **Carcinogenicity Classification (components present at 0.1% or more):**

The International Agency for Research on Cancer (IARC):

Sodium Sulfite: 3 (Classification not possible from current data)

U.S. National Toxicology Program (NTP): none

U.S. Occupational Safety and Health Administration (OSHA): none



## Material Safety Data Sheet

### #D-27270 – Part B

#### **SECTION X - Special Precautions**

**Precautions to be Taken in Handling and Storage:** Do not store or consume food, drink or tobacco in surrounding area. Wash thoroughly after handling.

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**Revised: 3/27/08**