

## **SAFETY DATA SHEETS**

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

073266251

**The safety data sheets (SDS) in this packet apply to the individual products listed below. Please refer to invoice for specific item number(s).**

073266269

# MATERIAL SAFETY DATA SHEET

FI Sales, LLC.

Product: **X-ray Film Fixer Solution**Revision Date: **1/3/2008**

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## 1. CHEMICAL PRODUCT & COMPANY INFORMATION

Product Identifier: **X-ray Film Fixer solution, Ready-To-Use strength**General Use: **Processing (image fixing & silver removal) of exposed X-Ray Film for viewing and storage**

Manufactured in the U.S.A. for:

FI Sales, LLC., 761 N. 17th Street, Unit 17, St. Charles, Illinois 60174 (U.S.A.)

Business Hours Phone: (630) 444 - 1380

FAX: (630) 444 - 1381

**Chemical Emergency only, 24 Hour / 7 Day Response Phone: (800) 535-5053 & (352) 323 - 3500 INFOTRAC**

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Ingredient	CAS No.	% by Wt.	Exposure Limits (ppm)		ACGIH TLV	STEL
			OSHA TWA	PEL		
Ammonium Thiosulfate	7763-18-8	12 - 15	N/Est	N/Est	N/Est	N/Est
(Ammonia, potential off-gas)	7664-41-7		50	N/Av	25	35
Acetic Acid	64-19-7	1 - 2.5	N/Est	10	10	15
Sodium Sulfite	7757-83-7	1 - 2.5	N/Est	N/Est	N/Est	N/Est
(Sulfur Dioxide, potential off-gas)	7446-09-5		5	N/Av	2	5
N/Est = Not Established			N/Av = Not Available		(s) = skin contact limit	(c) = ceiling limit

## 3. HAZARDS IDENTIFICATION

**EMERGENCY OVERVIEW:** Not Regulated as liquid product. Harmful or fatal if swallowed.

### POTENTIAL HEALTH EFFECTS:

**INHALATION:** Fumes and vapors in areas at 75°F or cooler with good ventilation are mildly irritating to upper respiratory tract. Avoid using product in confined spaces without ventilation or with much warmer temperatures. Inhalation of liquid or mist, or dusts of dried product will cause same effects as "SKIN CONTACT" or "INGESTION" to body and respiratory system tissues.**EYE CONTACT:** Will cause severe irritation. May cause chemical burns or corneal damage.**SKIN CONTACT:** Avoid contact with liquid, mists, or spray to skin. Typically no ill effects for most people with occasional minor unprotected contact. Can be absorbed through skin and produce similar effects as INGESTION.**INGESTION:** Harmful or fatal if swallowed. Will cause severe distress (violent colic, diarrhea, spontaneous vomiting) of the gastrointestinal tract. Circulatory disturbances. Central Nervous System (CNS) depression. Potential aspiration hazard. Potential anaphylactic shock by allergic or asthmatic persons.**CHRONIC:** This product does NOT contain any ingredient designated by IARC, NTP, ACGIH, or OSHA as probable or suspected human carcinogen.

## 4. FIRST AID MEASURES

**INHALATION (of fumes):** Remove patient to fresh air if dizzy or other symptoms. If breathing has stopped, give cardio-pulmonary respiration (CPR) and call for medical assistance.**EYE CONTACT:** Flush with water for at least 15 minutes. Get medical attention immediately.**SKIN CONTACT:** Wash with soap and water after removing contaminated clothing. Provide extra attention to hair and other not easy to clean areas. Get medical attention if irritation occurs or immediately if the skin contact area was large or prolonged.**INGESTION:** Prevent aspiration of vomit into lungs. Induce vomiting immediately of conscious patient, and dilute stomach contents with water. Get medical attention immediately.

## 5. FIRE FIGHTING INFORMATION AND MEASURES

**FLASH POINT:** Product is Not Flammable**METHOD:** None**AUTOIGNITION TEMPERATURE:** N/Av**FLAMMABLE LIMITS:** N/Av**HAZARDOUS COMBUSTION PRODUCTS:** NONE. Thermal decomposition of liquid will release Ammonia gas and Sulfur dioxide. After the liquid has evaporated, there may be other unknown organic and inorganic potentially toxic or corrosive combustion by-product compounds.**EXTINGUISHING MEDIA RECOMMENDED:** None specifically required for this product. Media used should be controlled by other materials involved in fire.**FIRE FIGHTING INSTRUCTIONS:** Wear self-contained breathing apparatus and full protective equipment for all indoor and outdoor fires.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Neutralize pH of liquid with weak alkali base such as sodium carbonate or baking soda. Absorb with inert absorbent and place in chemical resistant liquid-proof container. Only small quantities may be rinsed down sanitary sewer.

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**LARGE SPILL:** Dike spill and contain to prevent run-off. Do NOT contaminate natural waterways (high nitrogen content). Neutralize pH of liquid with alkali / base. Transfer liquid to chemically resistant liquid storage containers. Dispose at a licensed facility according to all applicable regulations.

## 7. HANDLING AND STORAGE

**HANDLING:** Use in a well-ventilated area away from extreme heat. Avoid creating mist or spray. Keep containers closed. Wear protective equipment and clothing. Wash hands and gloves thoroughly after handling containers or contact with solution.

**STORAGE:** Keep in well-ventilated areas between 40°F and 90°F.

## 8. EXPOSURE CONTROL / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** General or local exhaust should be used as required to keep vapors below exposure limits.

**RESPIRATORY PROTECTION:** If vapor concentration exceeds allowable exposure limits or as general safety precaution, use a NIOSH/MSHA approved acid vapor cartridge (Sulfur Dioxide), canister respirator, self-contained breathing equipment or supplied air breathing equipment if exposure limits are exceeded. Follow the OSHA guidelines in 29 CFR 1910.134.

**SKIN PROTECTION:** Use impervious gloves and an impervious gown (or impervious apron and sleeves).

**EYE PROTECTION:** Use chemical splash goggles. A face shield should also be used if splashes to the face can be expected.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Boiling Range:</b>	220°F +	<b>Melting Point:</b>	30°F
<b>Vapor Pressure:</b>	18mm Hg @ 20°C	<b>Vapor Density (Air = 1):</b>	0.6
<b>Solubility in Water:</b>	total / 100%	<b>Specific Gravity:</b>	1.1 - 1.2
<b>Odor:</b>	Sulfurous / acetate odor	<b>% Volatile by Volume:</b>	80%
<b>Appearance:</b>	Transparent liquid with slight yellow/green tint	<b>pH:</b>	5.0 - 6.0

## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY (Conditions to avoid):** Extreme heat.

**INCOMPATIBILITY:** Strong bases, reducing agents, aluminum alloys, magnesium alloys, zinc alloys.

**HAZARDOUS DECOMPOSITION:** Ammonia fumes, Sulfur oxides (SO, SO<sub>2</sub>, and SO<sub>3</sub>) fumes.

**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

No specific data for this product.

## 12. ECOLOGICAL INFORMATION

No specific data for this product combination, but Biological Oxygen Demand is expected to be high with high Nitrogen content.

## 13. DISPOSAL CONSIDERATIONS

See Section 6.

## 14. TRANSPORTATION INFORMATION

**U.S. DOT:** Product is not regulated.

## 15. REGULATORY INFORMATION

**TSCA INVENTORY of CHEMICAL SUBSTANCES STATUS:** YES, ALL LISTED

Ammonium Thiosulfate,	7763-18-8	12% - 15%
Ammonia (potential off-gas)	7664-41-7	
Acetic Acid,	64-19-7	1% - 2.5%
Sodium Sulfite,	7757-83-7	1% - 2.5%
Sulfur Dioxide, (potential off-gas)	7446-09-5	

## 16. OTHER INFORMATION

**NFPA HAZARD RATING:** Health 2(s), Fire 1, Reactivity 1

**KEY:** (4 = Extreme, 3 = High, 2 = Moderate, 1 = Slight, 0 = Minimal)

(s) = Skin contact may significantly add to the overall exposure

**NOTICE:** The information herein is presented in good faith and believed to be accurate and complete as of the effective date shown above. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that its activities with this product and its disposal comply with all federal, state, and local laws, and of the resident country.

# SAFETY DATA SHEET

## SECTION 1 - General Information

PRODUCT NAME	<b>Med-Dent™ Fixer Premixed</b>				
PRODUCT USE	Photographic Solution	HMIS SCALE: Health	1	Flamability	0
SUPPLIER	White Mountain Imaging	Reactivity	0	PPE	C
ADDRESS	PO Box 216 Salisbury, NH 03268	CATALOG #:			
PHONE NO	603-648-2124	EMERGENCY TEL #	CHEMTREC 800-424-9300	NS-204, NS-324	

## SECTION 2 - Hazards Identification

### Precautionary Statement.

Skin: May cause mild skin irritation and or reaction.

Eye: Can cause irritation of eyes and mucous membranes.

Oral: May be harmful if swallowed

EFFECTS OF CRONIC EXPOSURE TO PRODUCT

None known.

(n/c: not within OSHA classification limits.)

Category	
OSHA/GHS	GHS
n/c	5
2B	2B
n/c	5

### WARNING

## SECTION 3 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50
Water	7732-18-5	90-95	Not listed	42.6 gm/kg
Ammonium Thiosulfate	7783-18-8	8-12	Not listed	2890 mg/kg
Sodium Sulfite	7757-83-7	<2	Not listed	2825 mg/kg
Sodium Acetate	127-09-03	< 2	Not listed	3530 mg/kg

## 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

Flamability YES ☐ NO ☒ IF YES UNDER WHAT CONDITIONS

### MEANS OF EXTINGUISHING

As needed to extinguish adjacent fire source.

FLASH POINT (C/F) AND METHOD	UPPER LIMIT ( % BY VOLUME)	LOWER LIMIT ( % BY VOLUME)	AUTOIGNITION TEMPERATURE (C/F)
Not appropriate	Not appropriate	Not appropriate	Not appropriate
HAZARDOUS COMBUSTION PRODUCTS	EXPLOSION DATA	SENSITIVITY TO IMPACT	SENSITIVITY TO STATIC DISCHARGE
"See Hazardous Decomposition Products"	Not susceptible	Not susceptible	Not susceptible

## 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, 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.

**ABX™ Fixer Premixed****SECTION 8 - Exposure Controls**

VENTILLATION	Good general ventilation		
SKIN	Latex or nitrile	EYE: Splash goggles	RESPIRATORY Not normally required
OTHER	Eye wash station		

**SECTION 9 - Physical & Chemical Properties**

PHYSICAL STATE	ODOR & APPEARANCE			ODOR THRESHOLD
Liquid	Light Blue liquid with slight vinegar odor.			Not available
VAPOR PRESSURE (mm-Hg)	VAPOR DENSITY (Air=1)	EVAPORATION RATE (Water=1)	BOILING POINT	FREEZING POINT
<17 mm Hg	0.6 mm Hg	Not Available	> 212 F	< 32 F
pH	SPECIFIC GRAVITY	SOLUBILITY IN WATER	COEFF WATER/OIL	%VOLATILE (BY VOLUME)
4.40	1.085	Complete	N/A	80-90% as water

**SECTION 10 - Stability & Reactivity Data**

CHEMICAL STABILITY	IF NO, UNDER WHAT CONDITIONS		
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>			
INCOMPATIBLE WITH OTHER SUBSTANCES	IF YES, WHICH ONES?		
YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>	Strong reducing agents & Strong bases.		
REACTIVITY AND UNDER WHAT CONDITIONS	Stable under ambient pressure and temperature		
HAZARDOUS DECOMPOSITION PRODUCTS	Sulfur dioxide & ammonia		

**SECTION 11 - Toxicological Information**

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
None known	Skin: Irritant	None known	Not listed by IARC, OSHA, or ACGIH
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
None Known	Not Known	None known	None 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)  
Not a controlled product under Canadian WHMIS regulation

**SECTION 16 - Other Information**

The information contained in this SDS 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.