SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME	3-7-90 Fixer Replenisher - Concentrate - PART A Spectra - Fixer Replenisher - Concentrate - PART A	CAT No.:	250473 253494 256992
PRODUCT USE	Photographic Solution	HMIS SCALE:	Health 1 Flamability 0 Reactivity 0 PPE C
SUPPLIER	Merry X-Ray Corporation		
ADDRESS	8020 Tyler blvd., Mentor, OH 44060		
PHONE NO	(440)701-1200	EMERGENCY TEL #	CHEMTREC 800-424-9300

SECTION 2 - Hazards Identification

Precautionary Statement.	Classification
Skin: May cause mild skin irritation and or reaction.	5
Eye: May cause burning or irritation of eyes and mucous membranes.	2A
Oral: May be harmful if swallowed or inhaled	3

WARNING

EFFECTS OF CRONIC EXPOSURE TO PRODUCT

None known.

SECTION 3 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS #	W/W %	Permissible Exposure Limit	LD50
Water	7732-18-5	40-60	Not listed	42.6 gm/kg
Ammonium Thiosulfate	7783-18-8	30-40	Not listed	2890 mg/kg
Sodium Sulfite	7757-83-7	5-10	Not listed	2825 mg/kg
Acetic Acid	64-19-7	1-3	OSHA TWA 10 ppm	3310 mg/kg

EFFECTS OF CRONIC EXPOSURE TO PRODUCT

None known.

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 [X] 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 susceptable	Not susceptable

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.

SECTION 8 - Exposure Controls

VENTILLATION	Good general ventillation		
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	Clear, colorless 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	%VOLATOILE (BY VOLUME)
5.20	1.32	Complete	N/A	50% as water

SECTION 10 - Stability & Reactivity Data

CHEMICAL STABILITY — YES [X] NO [ ] — IF NO, UNDER WHAT CONDITIONS

INCOMPATABLE WITH OTHER SUBSTANCES — YES [X] NO [ ] — IF YES, WHICH ONES? 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 In formation

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
Acetic acid 10 ppm	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, Acetic acid 500 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.

SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME	3-7-90 Fixer Replenisher Concentrate - PART B Spectra - Fixer Replenisher - Concentrate -PART B	CAT No.:	250473 253494 256992
PRODUCT USE	Photographic Solution	HMIS SCALE: Health 1	Flamability 0 Reactivity 0 PPE C
SUPPLIER	Merry X-Ray Corporation		
ADDRESS	8020 Tyler blvd., Mentor, OH 44060		
PHONE NO	(440)701-1200	EMERGENCY TEL #	CHEMTREC 800-424-9300

SECTION 2 - Hazards Identification

Precautionary Statement.	Classification
Skin: May cause mild skin irritation.	5
Eye: Causes serious eye irritation.	2A
Oral: Harmful if swallowed and enters airways.	2

WARNING

EFFECTS OF CRONIC EXPOSURE TO PRODUCT

None known.

SECTION 3 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50
Water	7732-18-5	70-80	Not listed	42.6 gm/kg
Aluminum Sulfate	10043-01-3	20-30	Not listed	2000mg/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 [X] 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 susceptable	Not susceptable

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.

SECTION 8 - Exposure Controls

VENTILLATION	Good general ventillation		
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	Odorless, white or creamy white solution			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	%VOLATOILE (BY VOLUME)
3.5 (1% Solution)	1.33	Complete	N/A	70% as water

SECTION 10 - Stability & Reactivity Data

CHEMICAL STABILITY — YES [X] NO [ ] — IF NO, UNDER WHAT CONDITIONS

INCOMPATABLE WITH OTHER SUBSTANCES — YES [X] NO [ ] — IF YES, WHICH ONES? Precipitates alkalis

REACTIVITY AND UNDER WHAT CONDITIONS: Stable under ambient pressure and temperature

HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures sulfur oxides may be formed.

SECTION 11 - Toxicological In formation

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
Aluminum sulfate 2 mg/M3	Skin: Irritant	None known	No Carcinogenic Chemicals in this Product
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

Aluminum sulfate, Class 9,UN 3082, PG III for quantities greater than 5000 lb. Not applicable for quantities less than 5000 lb.

SECTION 15 - Regulatory Information

No Data Available

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.

SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME	3-7-90 Fixer Replenisher - Working Solution Spectra - Fixer Replenisher - Working Solution	CAT No.:	250473 253494 256992
PRODUCT USE	Photographic Solution	HMIS SCALE: Health 1	Flamability 0 Reactivity 0 PPE C
SUPPLIER	Merry X-Ray Corporation		
ADDRESS	8020 Tyler blvd., Mentor, OH 44060		
PHONE NO	(440)701-1200	EMERGENCY TEL #	CHEMTREC 800-424-9300

SECTION 2 - Hazards Identification

Precautionary Statement.	Classification
Skin: May cause mild skin irritation and or reaction.	5
Eye: May cause burning or irritation of eyes and mucous membrains.	1B
Oral: May be harmful if swallowed or inhaled	3

WARNING

EFFECTS OF CRONIC EXPOSURE TO PRODUCT

None known.

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
Aluminum sulfate	10043-01-3	<2	ACGIH TWA 2mg/m3	2000 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 [X] 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 susceptable	Not susceptable

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.

SECTION 8 - Exposure Controls

VENTILLATION	Good general ventillation				
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	Clear, colorless 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	%VOLATOILE (BY VOLUME)
4.30	1.085	Complete	N/A	80-90% as water

SECTION 10 - Stability & Reactivity Data

CHEMICAL STABILITY — YES [X] NO [ ] — IF NO, UNDER WHAT CONDITIONS

INCOMPATABLE WITH OTHER SUBSTANCES — YES [X] NO [ ] — IF YES, WHICH ONES? 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 In formation

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.