

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

Product Name: T2 Automatic Fixer, Working Solution (MRF) **Catalog #:** 4300F
Product Use: Photographic fixer **HMIS SCALE:** Health 1 Flammability 0
Supplier: Shimadzu Medical Systems Oceania Pty Ltd **Reactivity 0** PPE C
Address: Unit E, 10-16 South Street, Rydalmere, NSW 2116
Phone No.: 02-9898-2444 **Emergency Tel.:** 1800 812 774 or 0419 468 514

SECTION 2 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS No.	W?W %	PEL	LD50	LC50
Water	7732-18-5	90-95	not listed	42.6 gm/kg	not available
Ammonium Thiosulfate	7783-18-8	12-Aug	not listed	2890 mg/kg	not available
Sodium Sulfite	7757-83-7	<2	not listed	2825 mg/kg	not available
Aluminum sulfate	10043-01-3	<2	ACGIH TWA 2mg/m3	6201 mg/kg	not available

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes.
May cause mild skin irritation and or allergic reaction.
Prolonged inhalation of vapors may be irritating and cause headaches

EFFECTS OF CHRONIC 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

Flammability YES NO IF YES UNDER WHAT CONDITIONS

MEANS OF EXTINGUISHING

As needed to extinguish adjacent fire source.

FLASH POINT (C/F) **Upper limit % by volume** **Lower limit % by volume** **Auto ignition 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

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, material 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.

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Product Name: T2 Automatic Fixer, Working Solution (MRF) Catalog #: 4300F

SECTION 8 - Exposure Control

VENTILLATION Good general ventilation

SKIN Latex or Nitril

RESPIRATORY Not normally required

OTHER Eye wash station

EYE: Splash goggles

SECTION 9 - Physical & Chemical Properties

PHYSICAL STATE	ODOR & APPEARANCE			ODOR THRESHOLD
Liquid	Clear, colorless with slight vinegar odor.			Not available
VAPOUR PRESSURE (mm-Hg)	Vapor Density (Air=1)	Evaporation Rate (Water=1)	Boiling Point	Freeze Point
<17 mm Hg	0.6 mm Hg	Not Available	> 212 F	< 32 F
pH	Specific Gravity	Solubility in Water	Coef H2O/oil	% Volatile (by volume)
4.3	1.085	Complete	N/A	50%

SECTION 10 - Stability & Reactivity Data

Chemical Stability IF NO, UNDER WHAT CONDITIONS

YES NO

INCOMPATIBLE WITH OTHER SUBSTANCES IF YES, WHICH ONES?

YES NO Strong reducing agents & Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide & ammonia

REACTIVITY: Stable under ambient pressure & temperature.

SECTION 11 - Toxicological Information

EXPOSURE LIMITS	Irritancy of Product	Sensitation to Product	CARCINOGENICITY
None Known	Skin: Irritant	None known	Not listed by IARC, OSHA, or ACGIH
TERATOGENICITY	REPRODUCTIVE TOXIN	MUTAGENICITY	SYNERGISTIC PRODUCTS
None Known	Not Known	Not Known	Not 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 MSDS 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.

DATE: 1-Mar-13

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MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

Product Name: T2 Automatic Fixer PART A Concentrate (MRF) **Catalog #:** 4300F
Product Use: Photographic fixer **HMIS SCALE:** Health 1 Flammability 0
Supplier: Shimadzu Medical Systems Oceania Pty Ltd **Reactivity 0** PPE C
Address: Unit E, 10-16 South Street, Rydalmere, NSW 2116
Phone No.: 02-9898-2444 **Emergency Tel.:** 1800 812 774 or 0419 468 514

SECTION 2 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS No.	W?W %	PEL	LD50	LC50
Water	7732-18-5	40-50	not listed	42.6 gm/kg	not available
Ammonium Thiosulfate	7783-18-8	40-50	not listed	2890 mg/kg	not available
Sodium Sulfite	7757-83-7	5 - 10	not listed	2825 mg/kg	not available
Acetic Acid	64-19-7	5 - 10	OSHA TWA 10 ppm	3310 mg/kg	5610-1h

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes.
May cause mild skin irritation and or allergic reaction.
Prolonged inhalation of vapors may be irritating and cause headaches

EFFECTS OF CHRONIC 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

Flammability YES NO IF YES UNDER WHAT CONDITIONS

MEANS OF EXTINGUISHING

As needed to extinguish adjacent fire source.

FLASH POINT (C/F) Upper limit % by volume Lower limit % by volume Auto ignition 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

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, material 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.

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Product Name: T2 Automatic Fixer PART A Concentrate (MRF) Catalog #: 4300F

SECTION 8 - Exposure Control

VENTILLATION Good general ventilation

SKIN Latex or Nitril

RESPIRATORY Not normally required

OTHER Eye wash station

EYE: Splash goggles

SECTION 9 - Physical & Chemical Properties

PHYSICAL STATE	ODOR & APPEARANCE			ODOR THRESHOLD
Liquid	Clear solution, colorless with slight vinegar odor.			Not available
VAPOUR PRESSURE (mm-Hg)	Vapor Density (Air=1)	Evaporation Rate (Water=1)	Boiling Point	Freeze Point
<17 mm Hg	0.6 mm Hg	Not Available	> 212 F	< 32 F
pH	Specific Gravity	Solubility in Water	Coef H2O/oil	% Volatile (by volume)
5.2	1.32	Complete	N/A	50%

SECTION 10 - Stability & Reactivity Data

Chemical Stability IF NO, UNDER WHAT CONDITIONS

YES X NO

INCOMPATIBLE WITH OTHER SUBSTANCES IF YES, WHICH ONES?

YES X NO Strong reducing agents & Strong bases.

HAZARDOUS DECOMPOSITION PRODUCTS: Sulfur dioxide & ammonia

REACTIVITY: Stable under ambient pressure & temperature.

SECTION 11 - Toxicological Information

EXPOSURE LIMITS	Irritancy of Product	Sensitation to Product	CARCINOGENICITY
Acetic acid 10 ppm	Skin: Irritant	None known	Not listed by IARC, OSHA, or ACGIH
TERATOGENICITY	REPRODUCTIVE TOXIN	MUTAGENICITY	SYNERGISTIC PRODUCTS
None Known	Not Known	Not Known	Not 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 MSDS 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.

DATE: 1-Mar-13

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MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

Product Name: T2 Automatic Fixer PART B Concentrate (MRF) **Catalog #:** 4300F

Product Use: Photographic fixer **HMIS SCALE:** Health 1 Flamability 0

Supplier: Shimadzu Medical Systems Oceania Pty Ltd **Reactivity 0 PPE C**

Address: Unit E, 10-16 South Street, Rydalmere, NSW 2116

Phone No.: 02-9898-2444 **Emergency Tel.:** 1800 812 774 or 0419 468 514

SECTION 2 - Product & Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS No.	W?W %	PEL	LD50	LC50
Water	7732-18-5	70-80	not listed	42.6 gm/kg	not available
Aluminum sulfate	10043-01-3	20-30		6201mg/kg	not available

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Harmful if swallowed. May cause burning or irritation of eyes and mucous membranes. May cause mild skin irritation and or

May cause mild skin irritation and or allergic reaction.

Prolonged inhalation of vapors may be irritating and cause headaches

EFFECTS OF CHRONIC 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 IF YES UNDER WHAT CONDITIONS

MEANS OF EXTINGUISHING

As needed to extinguish adjacent fire source.

FLASH POINT (C/F) **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

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, material 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.

PAGE 2.

Product Name: T2 Automatic Fixer PART B Concentrate (MRF) Catalog #: 4300F

SECTION 8 - Exposure Control

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

SECTION 9 - Physical & Chemical Properties

PHYSICAL STATE	ODOR & APPEARANCE		ODOR THRESHOLD	
Liquid	Odorless, white or creamy white solution		Not available	
VAPOUR PRESSURE (mm-Hg)	Vapour Density (Air=1)	Evaporation Rate (Water=1)	Boiling Point	Freeze Point
<17 mm Hg	0.6 mm Hg	Not Available	> 212 F	< 32 F
pH	Specific Gravity	Solubility in Water	Coef H2O/oil	% Volatile (by volume)
3.5 (1% solution)	1.33	Complete	N/A	70%

SECTION 10 - Stability & Reactivity Data

Chemical Stability IF NO, UNDER WHAT CONDITIONS
YES X NO _____
INCOMPATIBLE WITH OTHER SUBSTANCES IF YES, WHICH ONES?
YES X NO _____ Precipitates alkalis
HAZARDOUS DECOMPOSITION PRODUCTS: At elevated temperatures sulfur oxides may be formed.
REACTIVITY: Stable under ambient pressure & temperature.

SECTION 11 - Toxicological Information

EXPOSURE LIMITS	Irritancy of Product	Sensitization to Product	CARCINOGENICITY
Aluminum sulfate 2 mg/M3	Skin: Irritant	None known	There are no carcinogenic chemicals in this product.
TERATOGENICITY	REPRODUCTIVE TOXIN	MUTAGENICITY	SYNERGISTIC PRODUCTS
None Known	Not Known	Not Known	Not 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 MSDS 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.

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