

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME **T2 ESC Developer Systems Cleaner, Part 1**

PRODUCT USE	Photographic solution	HMIS SCALE	HEALTH 1	FLAMMABILITY 0	REACTIVITY 0	PPE C
SUPPLIER	White Mountain Imaging	CATALOG #		4902EC		
ADDRESS	PO Box 216 Salisbury NH 03268					
PHONE NO.	603-648-2124	EMERGENCY TEL #	CHEMTREC 800-424-9300			

SECTION 2 - Product and Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50	LC50
Water	7732-18-5	95-99	not listed	42.6 gm/kg	not available
Potassium permanganate	7722-64-7	2-4	OSHA C 5 mg(Mn)m3	1090 mg/kg	not available

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Harmful if swallowed. May cause irritation of eyes and mucous membranes. May cause mild skin irritation and or allergic reaction. Prolonged inhalation of vapors from dilute solutions may be mildly irritating.

EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

None known

SECTION 4 - First Aid Measures

SKIN CONTACT

Rinse with ESC diltuted neutralizer & wash exposed skin 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 EXTINGUISHION

As needed to extinguish adjacent fire source.

FLASHPOINT (°C) AND METHOD	UPPER FLAMMABLE LIMIT (% BY VOLUME)	LOWER FLAMMABLE LIMIT (% BY VOLUME)	AUTOIGNITION TEMPERATURE (°C)
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

Neutralize with diltuted ESC Neutralizer Rinse or sodium sulfite. When neutralization is complete the solution will be white. 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 splash goggles, impervious gloves and apron.

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.

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME **T2 ESC Developer Systems Cleaner, Neutralizer**

PRODUCT USE	Photographic solution	HMIS SCALE	HEALTH 1	FLAMMABILITY 0	REACTIVITY 0	PPE C
SUPPLIER	White Mountain Imaging	CATALOG #		4902EC		
ADDRESS	PO Box 216 Salisbury NH 03268					
PHONE NO.	603-648-2124	EMERGENCY TEL #	CHEMTREC 800-424-9300			

SECTION 2 - Product and Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50	LC50
Water	7732-18-5	95-99	not listed	42.6 gm/kg	not available
Sodium sulfite	7757-83-7	10-25	not listed	2825 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 cold or ambient 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 EXTINGUISHION

As needed to extinguish adjacent fire source.

FLASHPOINT (°C) AND METHOD	UPPER FLAMMABLE LIMIT (% BY VOLUME)	LOWER FLAMMABLE LIMIT (% BY VOLUME)	AUTOIGNITION TEMPERATURE (°C)
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, 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.

SECTION 8 - Exposure Controls

VENTILATION Good general ventilation.

SKIN Latex or nitrile

EYE Splash goggles

RESPIRATORY Not normally required

OTHER Eye wash station

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE Liquid	ODOR AND APPEARANCE Clear white liquid			ODOR THRESHOLD Not available
VAPOUR PRESSURE (mmHg) < 17 mm Hg	VAPOUR DENSITY (Air = 1) 0.6 mm Hg	EVAPORATION RATE (Water = 1) Not available	BOILING POINT > 212°F	FREEZING POINT < 32°F
pH 7.0	SPECIFIC GRAVITY 1.110	SOLUBILITY IN WATER (20°C) Complete	COEFF WATER OIL Not available	PERCENT VOLATILE (BY VOLUME) 85%

SECTION 10 - Stability and Reactivity DataCHEMICAL STABILITY YES NO IF NO, UNDER WHAT CONDITIONS
Strong reducing agents, strong acids.INCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONES?
YES NO REACTIVITY, AND UNDER WHAT CONDITIONS
Stable under ambient pressure and temperature.HAZARDOUS DECOMPOSITION PRODUCTS
Sulfur dioxide**SECTION 11 - Toxicological Information**EXPOSURE LIMITS
Sulfuric acid 1.0 mg/m3IRRITANCY OF PRODUCT
Skin: IrritantSENSITIZATION TO PRODUCT
None knownCARCINOGENICITY
Not listed by IARC,
OSHA or ACGIH.TERATOGENICITY
Not knownREPRODUCTIVE TOXICITY
Not knownMUTAGENICITY
Not knownSYNERGISTIC PRODUCTS
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: TPQ for sodium sulfite is 5000 lb

SARA Section 304, CERCLA Hazardous components

SARA Section 302,304,313 Hazardous components (None)

Not a controlled product under Canadian WHMIS regulations.

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.

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME **T2 ESC Developer Systems Cleaner, Part 2**

PRODUCT USE	Photographic solution	HMIS SCALE	HEALTH 1	FLAMMABILITY 0	REACTIVITY 0	PPE C
SUPPLIER	White Mountain Imaging	CATALOG #		4902EC		
ADDRESS	PO Box 216 Salisbury NH 03268					
PHONE NO.	603-648-2124	EMERGENCY TEL #	CHEMTREC 800-424-9300			

SECTION 2 - Product and Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50	LC50
Water	7732-18-5	95-99	not listed	42.6 gm/kg	not available
Sulfuric acid	7664-93-9	2-4	OSHA TWA 1 mg/m ³	2140 mg/kg	5.1 g/m ³ 2h

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

Dermatitis

SECTION 4 - First Aid Measures

SKIN CONTACT

Rinse with diluted ESC Neutralizer and wash exposed skin with soap and water. If irritation persists seek medical advice.

EYE CONTACT

Flush eyes with water for 15 minutes. Seek medical advice immediately

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 EXTINCTION

As needed to extinguish adjacent fire source.

FLASHPOINT (°C) AND METHOD	UPPER FLAMMABLE LIMIT (% BY VOLUME)	LOWER FLAMMABLE LIMIT (% BY VOLUME)	AUTOIGNITION TEMPERATURE (°C)
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

Neutralize with ESC Neutralizer Rinse or sodium sulfite. When neutralization is complete the solution will be white. 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 splash goggles, impervious gloves and apron.

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.

SECTION 8 - Exposure Controls

VENTIATION Good general ventilation.

SKIN Latex or nitrile

EYE Splash goggles

RESPIRATORY Not normally required

OTHER Eye wash station

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE Liquid	ODOR AND APPEARANCE Clear white liquid			ODOR THRESHOLD Not available
VAPOUR PRESSURE (mmHg) < 17 mm Hg	VAPOUR DENSITY (Air = 1) 0.6 mm Hg	EVAPORATION RATE (Water = 1) Not available	BOILING POINT > 212°F	FREEZING POINT < 32°F
pH 2.50	SPECIFIC GRAVITY 1.055	SOLUBILITY IN WATER (20°C) Complete	COEFF WATER OIL Not available	PERCENT VOLATILE (BY VOLUME) 85%

SECTION 10 - Stability and Reactivity DataCHEMICAL STABILITY YES NO IF NO, UNDER WHAT CONDITIONS
Strong reducing agents, strong bases.INCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONES?
YES NO REACTIVITY, AND UNDER WHAT CONDITIONS
Stable under ambient pressure and temperature.HAZARDOUS DECOMPOSITION PRODUCTS
Sulfur dioxide**SECTION 11 - Toxicological Information**EXPOSURE LIMITS
Sulfuric acid 1.0 mg/m3IRRITANCY OF PRODUCT
None knownSENSITIZATION TO PRODUCT
None knownCARCINOGENICITY
Not listed by IARC,
OSHA or ACGIH.TERATOGENICITY
Not knownREPRODUCTIVE TOXICITY
Not knownMUTAGENICITY
Not knownSYNERGISTIC PRODUCTS
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

Not a controlled product under Canadian WHMIS regulations.

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.

SECTION 8 - Exposure Controls

VENTILATION Good general ventilation.

SKIN Latex or nitrile

EYE Splash goggles

RESPIRATORY Not normally required

OTHER Eye wash station

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE Liquid	ODOR AND APPEARANCE Deep blue liquid			ODOR THRESHOLD Not available
VAPOUR PRESSURE (mmHg) < 17 mm Hg	VAPOUR DENSITY (Air = 1) 0.6 mm Hg	EVAPORATION RATE (Water = 1) Not available	BOILING POINT > 212°F	FREEZING POINT < 32°F
pH 9.50	SPECIFIC GRAVITY 1.020	SOLUBILITY IN WATER (20°C) Complete	COEFF WATER OIL Not available	PERCENT VOLATILE (BY VOLUME) Not available

SECTION 10 - Stability and Reactivity Data

 CHEMICAL STABILITY YES NO IF NO, UNDER WHAT CONDITIONS
Alcohol, HCL acids and organic substances.

 INCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONES?
 YES NO
REACTIVITY, AND UNDER WHAT CONDITIONS
Stable under ambient pressure and temperature.HAZARDOUS DECOMPOSITION PRODUCTS
Oxygen

SECTION 11 - Toxicological Information

EXPOSURE LIMITS Potassium permanganate 5 ppm TLV	IRRITANCY OF PRODUCT None known	SENSITIZATION TO PRODUCT None known	CARCINOGENICITY Not listed by IARC, OSHA or ACGIH.
TERATOGENICITY Not known	REPRODUCTIVE TOXICITY Not known	MUTAGENICITY Not known	SYNERGISTIC PRODUCTS 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 Potassium permanganate is 100 lb
 SARA Section 304, CERCLA Hazardous components
 SARA Section 302,304,313 Hazardous components (None)
 Not a controlled product under Canadian WHMIS regulations.

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.