

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - General Information

PRODUCT NAME **FR MFII Universal Fixer Replenisher, Working Solution (RTU)**

PRODUCT USE Photographic fixer

HMIS SCALE HEALTH **1** FLAMMABILITY **0** REACTIVITY **0** PPE **C**

SUPPLIER FR Chemical

CATALOG #  
44-602, 44-640, 42-798-300

ADDRESS 524 S. Columbus Ave Mt. Vernon NY 10550

PHONE NO. **914-667-2447**

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	90-95	not listed	Not	Not available
Ammonium thiosulfate	7783-18-8	8-12	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 skin reaction. Prolonged inhalation of vapors may be irritating and may 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 EXTINCTION

As needed to extinguish adjacent fire source.

FLASHPOINT (°C) AND METHOD

Not appropriate

UPPER FLAMMABLE LIMIT (% BY VOLUME)

Not appropriate

LOWER FLAMMABLE LIMIT (% BY VOLUME)

Not appropriate

AUTOIGNITION TEMPERATURE (°C)

Not appropriate

HAZARDOUS COMBUSTION PRODUCTS

See "Hazardous Decomposition Products".

EXPLOSION DATA SENSITIVITY TO IMPACT

Not susceptible

SENSITIVITY TO STATIC DISCHARGE

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, colorless liquid with slight ammonia odor			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 (°C) ≥ 212°F	FREEZING POINT (°C) ≤ 32°F
pH 4.20	SPECIFIC GRAVITY 1.085	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

INCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONES?

YES  NO  Strong reducing agents, strong bases.

REACTIVITY, AND UNDER WHAT CONDITIONS Stable under ambient pressure and temperature.

HAZARDOUS DECOMPOSITION PRODUCTS Ammonia

**SECTION 11 - Toxicological Information**

EXPOSURE LIMITS None known	IRRITANCY OF PRODUCT Skin: Irritant	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 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 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.