

# MATERIAL SAFETY DATA SHEET

## SECTION 1 - General Information

PRODUCT NAME **FR Manual X-Ray Developer/Replenisher**

PRODUCT USE X-ray processing solution

HMIS SCALE HEALTH **3** FLAMMABILITY **0** REACTIVITY **0** PPE **C**

SUPPLIER F.R. Chemicals, Inc.

CATALOG #  
710810,710820

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	60-100	not listed	42.6 gm/kg	not available
Sodium sulfite	7757-83-7	3-7	not listed	2825 mg/kg	not available
Hydroquinone	123-31-9	3-7	OSHA TWA 2 mg/m3	320 mg/kg	not available
Potassium hydroxide	1310-58-3	1-5	NIOSH (C) 2 mg/m3	365 mg/kg	not available

## SECTION 3 - Hazards Identification

### EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Eye contact may cause irritation or burning with possible tissue destruction. Possible discoloration of the conjunctiva. Skin contact may cause reddening, swelling or burning. If ingested corrosion of tissues may occur. Nausea, vomiting or abdominal pain possible. Inhalation may irritate or damage respiratory tract. May cause nausea or vomiting.

### EFFECTS OF CHRONIC EXPOSURE TO PRODUCT

Hydroquinone is known to cause dermatitis with prolonged or repeated contact. Sulfites may cause allergic reaction in some asthmatics.

## 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

If conscious, drink 2 glasses of water. DO NOT induce vomiting. Seek medical attention immediately.

### INHALATION

If inhaled, remove to fresh air. If symptoms occur, seek medical attention.

## SECTION 5 - Fire Fighting Measures

FLAMMABILITY YES  NO  IF YES, UNDER WHAT CONDITIONS

### MEANS OF EXTINGUISHMENT

As needed to extinguish adjacent fire source. Excessive heat may release sulfur dioxide vapors.

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 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**

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, odorless solution			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 10.8	SPECIFIC GRAVITY 1.27	SOLUBILITY IN WATER (20°C) Complete	COEFF WATER OIL Not available	PERCENT VOLATILE (BY VOLUME) 60-100%

**SECTION 10 - Stability and Reactivity Data**CHEMICAL STABILITY YES  NO  IF NO, UNDER WHAT CONDITIONSINCOMPATIBILITY WITH OTHER SUBSTANCES IF YES, WHICH ONES?  
YES  NO  Avoid strong acids and oxidizers

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

HAZARDOUS DECOMPOSITION PRODUCTS Does not polymerize

**SECTION 11 - Toxicological Information**

EXPOSURE LIMITS see section 2	IRRITANCY OF PRODUCT Skin: Irritant Eye: Irritant	SENSITIZATION TO PRODUCT May cause skin sensitization	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**

Call FR Chemical, Inc. for appropriate transportation information.

**SECTION 15 - Regulatory Information**

SARA: Reportable quantity (RQ) for Hydroquinone 5000 lb, Potassium hydroxide 1000 lb  
 SARA Section 304, CERCLA Hazardous components - (None)  
 SARA Section 302,304,313 Hazardous components (None)

**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.