

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME **HIC-ES X-ray Developer - Working Strength**

PRODUCT USE X-Ray Processing Chemical

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

SUPPLIER FR Chemicals, Incorporated

CATALOG #
44-504

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SECTION 2 - Product and Hazardous Ingredients Information

HAZARDOUS INGREDIENTS	CAS NUMBER	W/W %	Permissible Exposure Limit	LD50	LC50
Water	7732-18-5	>60	not listed	not available	Not available
Sodium metabisulfite	7681-57-4	<10	NIOSH TWA 5 mg/m3	2000 mg/kg	not available
Hydroquinone	123-31-9	<10	OSHA TWA 2 mg/m3	320 mg/kg	not available
Potassium hydroxide	1310-58-3	<10	NIOSH (C) 2 mg/m3	365 mg/kg	not available

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Eyes: May cause burning or irritation of eyes and mucous membranes.

Skin: May cause mild skin irritation and or allergic reaction.

Ingestion: Harmful if swallowed.

Inhalation: 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 EXTINGUISHION

Use a water spray or BC fire extinguisher. As needed to extinguish adjacent fire source. Firefighters should use a breathing apparatus plus protective gloves.

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

Not susceptible

SENSITIVITY TO IMPACT

SENSITIVITY TO STATIC DISCHARGE

Not susceptible

SECTION 6 - Accidental Release

Cut off the source of the leak. Wear appropriate protective equipment. If possible, ventilate the area. 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. Prevent liquid from entering storm sewers or waterways. Treatment, storage, transportation and disposal must be in accordance with federal, state and local regulations.

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	Ensure there is good ventilation of the area in which the product is used to keep concentrations below the				
SKIN	Wear nitrile gloves	EYE	Wear splash goggles	RESPIRATORY	Not required if exposure limits are below standards.
OTHER	Eye wash station in area				

SECTION 9 - Physical and Chemical Properties

PHYSICAL STATE	ODOR AND APPEARANCE			ODOR THRESHOLD
Liquid	Pale yellow liquid			Not available
VAPOUR PRESSURE (mmHg)	VAPOUR DENSITY (Air = 1)	EVAPORATION RATE (Water = 1)	BOILING POINT (°C)	FREEZING POINT(°C)
< 17 mm Hg	0.6 mm Hg	Not available	> 100°C	< 0°C
pH	SPECIFIC GRAVITY	SOLUBILITY IN WATER (20°C)	COEFF WATER OIL	PERCENT VOLATILE (BY VOLUME)
10.50	1.080	Complete	Not available	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 oxidizers and strong acids

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

HAZARDOUS DECOMPOSITION PRODUCTS Sulfur dioxide

SECTION 11 - Toxicological Information

EXPOSURE LIMITS	IRRITANCY OF PRODUCT	SENSITIZATION TO PRODUCT	CARCINOGENICITY
Hydroquinone 2.0 mg/m ³ Potassium hydroxide 2.0	Skin: Irritant	None known	Not listed by IARC, OSHA or ACGIH.
TERATOGENICITY	REPRODUCTIVE TOXICITY	MUTAGENICITY	SYNERGISTIC PRODUCTS
Not known	Not known	Not known	Not known

SECTION 12 - Ecological Information

Prevent liquid from entering storm sewers or waterways. Risk of bioaccumulation o aquatic species is not 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 Hydroquinone 5000 lb, Potassium hydroxide 1000 lb
 SARA Section 304, CERCLA Hazardous components - (None)
 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.