

MATERIAL SAFETY DATA SHEET

SECTION 1 - General Information

PRODUCT NAME **RP-3 Automatic x-ray Developer Concentrate, Part A**

| | | | | | | |
|-------------|---------------------------------|-----------------|------------------------------|-----------------------|---------------------|--------------|
| PRODUCT USE | Photographic solution | HMIS SCALE | HEALTH 2 | FLAMMABILITY 0 | REACTIVITY 0 | PPE C |
| SUPPLIER | White Mountain Imaging | CATALOG # | | 4510D-RP3, 45200D-RP3 | | |
| ADDRESS | P.O. 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 | 60-65 | Not established | 42.6 gm/kg | not available |
| Potassium sulfite | 10117-38-1 | 20-25 | Not established | 4340 mg/kg | not available |
| Hydroquinone | 123-31-9 | 8-10 | OSHA TWA 2 mg/m3 | 320 mg/kg | not available |
| Diethylene glycol (2-hydroxyethyl ether) | 111-46-6 | 1-5 | Not established | 12565 mg/kg | 130 mg/m ³ 2h |
| Potassium hydroxide | 1310-58-3 | 2-6 | NIOSH (C) 2 mg/m3 | 365 mg/kg | not available |

SECTION 3 - Hazards Identification

EFFECTS OF ACUTE EXPOSURE TO PRODUCT

Harmful if swallowed. May cause irritation of eye 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 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

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 Nitrile gloves

EYE Splash goggles

RESPIRATORY Not normally required

OTHER Eye wash station

SECTION 9 - Physical and Chemical Properties

| | | | | |
|--|--|--|---|---|
| PHYSICAL STATE Liquid | ODOR AND APPEARANCE Odorless, clear pale yellow color. | | | ODOR THRESHOLD Not available |
| VAPOUR PRESSURE (mmHg) < 24 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 10.7 | SPECIFIC GRAVITY 1.28 | SOLUBILITY IN WATER (20°C) Complete | COEFF WATER OIL Not available | PERCENT VOLATILE (BY VOLUME) 60-65% |

SECTION 10 - Stability and Reactivity Data

| | | | |
|--|--|--|--|
| CHEMICAL STABILITY YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | IF NO, UNDER WHAT CONDITIONS Oxidizing agents and strong acids | | |
| INCOMPATIBILITY WITH OTHER SUBSTANCES YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | IF YES, WHICH ONES? | | |
| REACTIVITY, AND UNDER WHAT CONDITIONS | Stable under ambient pressure and temperature. | | |
| HAZARDOUS DECOMPOSITION PRODUCTS | Carbon oxides, sulfur oxides | | |

SECTION 11 - Toxicological Information

| | | | |
|--|--|---|--|
| EXPOSURE LIMITS Hydroquinone 2.0 mg/m3 Potassium hydroxide 2.0 | IRRITANCY OF PRODUCT Skin: Irritant Eyes: 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

Estimated from components: Fish LC50: <1 mg/L, Daphnid EC50: <1 mg/L, Algal IC50: 1-10 mg/L, Waste treatment organisms EC50 10-100 mg/L, Potential Bioaccumulation: log Pow <1, COD ~330 g/L, BOD ~ 114 g/L.

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 by DOT and TDG

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)
 Regulated as D2-B in Canada

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.