



Division of Kingscote Chemicals

## WATER TRACING PRODUCTS FLUORESCENT INDUSTRIAL RED

### TECHNICAL DATA BULLETIN

Bright Dyes Industrial Red products are specially formulated versions of Rhodamine B, one of the traditional fluorescent water tracing and leak detection materials. It may be detected visually, by ultraviolet light and by appropriate fluorometric equipment. Visually the dye appears as a bright dark red to magenta, depending on its concentration and under ultraviolet light as a bright orange.

Compared to Bright Dyes FLT Yellow/Green or FWT Red products, Industrial Red is significantly less resistant to absorption on inorganic and organic suspended matter. There by limiting its suitability in many applications, particularly where fluorometric detection is needed. This dye has greater resistance to sunlight than FLT Yellow/Green and is equivalent to FWT Red. Industrial Red products should not be used: 1) In drinking water systems, near drinking water intakes or where downstream impingement on a drinking water system might occur, or 2) Where any aquatic ecosystem might be chronically exposed to detectable amounts of the dye. A qualified hydrologist or other industry professional should evaluate the use and suitability of these products.

General Properties	Tablets	Liquid	Powders
Detect ability of active ingredient <sup>1</sup>	Visual <100 ppb	Visual <100 ppb	Visual <100 ppb
Maximum absorbance wavelength <sup>2</sup>	550/588 nm	550/588 nm	550/588 nm
Appearance Size	Dark Maroon Cone 1.6cm diameter	Deep dark maroon aqueous solution	Dark green fine powder
Weight	1.15 oz $\pm$ 5%		
Dissolution Time	50% < 3 minutes 95% < 6 minutes	Immediate	50% < 3 minutes 95% < 6 minutes
Specific Gravity		1.05 $\pm$ 0.05 @ 25° C	
Viscosity		1.8 cps	
pH		1.5 $\pm$ @ 25° C	

Coverage of Products	One Tablet	One Pint Liquid	One Pound Powder
Light Visual	604 gallons	125,000 gallons	1,200,000 gallons
Strong Visual	60 gallons	12,500 gallons	120,000 gallons

Caution: These products may cause irritation and/or staining if allowed to come in contact with the skin. The use of gloves and goggles is recommended when handling this product, as with any other dye or chemical.

To our best knowledge the information and recommendations contained herein are accurate and reliable. However, this information and our recommendations are furnished without warranty, representation, inducement, or license of any kind, including, but not limited to the implied warranties and fitness for a particular use or purpose. Customers are encouraged to conduct their own tests and to read the material safety data sheet carefully before using.

<sup>1</sup> In deionized water in 100 ml flask. Actual detectability and coverage in the field will vary with specific water conditions.

<sup>2</sup> No significant change in fluorescence between 6 and 11 pH.