



WATER TRACING WAX PRODUCTS

FLUORESCENT INDUSTRIAL RED

Division of Kingscote Chemicals

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. Thereby 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 Use:

- * Examine Water Movement, Current, Flow (In springs, streams, lakes, ocean etc.)
- * Flow Mapping, Tracing and Time Studies
- * Pollution Studies (Discharge- Rate of Flow-Mixing, Diffusion and Dispersion – Circulation)

General Properties	Cakes	Cones	Donuts
Detect ability of active ingredient ¹	Visual <100 ppb	Visual <100 ppb	Visual <100 ppb
Maximum absorbance wavelength ²	550/588 nm	550/588 nm	550/588 nm
Appearance Size	Dark Maroon Cake 1 7/8" Base 7/8" Height	Dark Maroon Cone 3.0" Base 1 3/8" Height	Dark Maroon Donut 4" Diameter 4" Height / _" hole
Weight	1.25 oz ± 5%	4.5 oz ± 5%	32 oz ± 5%
Wrapping	Heat sealed in cold water soluble film	Heat sealed in cold water soluble film	Heat sealed in cold water soluble film
Dissolution Time	About 45 minutes in sea water	About 1 _ hours in sea water	About 3-5 hours in sea water

Coverage of Products	One Cake	One Cone	One Donut
Light Visual	2,400 gallons	9,600 gallons	74,000 gallons
Strong Visual	240 gallons	960 gallons	7,400 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.

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

² No significant change in fluorescence between 6 and 11 pH.