



Division of Kingscote Chemicals

WATER TRACING WAX PRODUCTS

FLUORESCENT FWT RED

TECHNICAL DATA BULLETIN

Bright Dyes FWT Red products are specially formulated versions of Rhodamine dye for convenient use in water tracing and leak detection studies. This bright, fluorescent red dye is certified by NSF International to ANSI/NSF Standard 60 for use in drinking water. It may be detected visually, by ultraviolet light and by appropriate fluorometric equipment. Today it is most often used visually. Visually the dye appears bright pink to red, depending on its concentration and under ultraviolet light as bright orange.

The dye is resistant to absorption on most suspended matter in fresh and salt water. Compared to Bright Dyes FLT Yellow/Green products it is significantly more resistant to degradation by sunlight and when used in fluorometry, stands out much more clearly against background fluorescence. As always a qualified hydrologist or other industry professional should evaluate the use and suitability of these products for any specific application.

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 Red Cone 1 7/8" Base 7/8" Height	Dark Red Cone 3.0" Base 1 3/8" Height	Dark Red Donut 4" Diameter 4" Height / 1/2" hole
Weight	1.25 oz \pm 5%	4.5 oz \pm 5%	32 oz \pm 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 ³	About 45 minutes in sea water	About 1 1/2 hours in sea water	About 3-5 hours in sea water

Coverage of Products	One Cake	One Cone	One Donut
Light Visual	2400 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.