



Division of Kingscote Chemicals ®

## WATER TRACING WAX PRODUCTS

### FLUORESCENT FLT ORANGE

#### TECHNICAL DATA BULLETIN

Bright Dyes Orange products are specially formulated versions of Xanthene dye, certified by NSF International to ANSI/NSF Standard 60 for use in drinking water. This dye is the traditional fluorescent water tracing and leak detection material and has been used for labeling studies from the beginning of the century. It may be detected visually, by UV light and by appropriate fluoremetric equipment. Today it is most often used visually. This dye has been used by the military to mark downed pilots for search and rescue operations over large water bodies. Visually the dye appears orange to red-orange, depending on its concentration and under UV light as bright yellow.

The dye is resistant to absorption on most suspended matter in fresh and salt water. However, compared to Bright Dyes FLT Yellow/Green products it is slightly more resistant to degradation by sunlight but less resistant than our FWT Red products. As always a qualified hydrologist or other industry professional should evaluate the use and suitability of these products for any specific application. Store product out of sunlight, in a cool and dry location. Shelf life is 4 years from date of purchase.

#### General Use:

- \* Examine Water Movement, Current, Flow (In springs, streams, lakes 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 <sup>1</sup>	Visual <100 ppb	Visual <100 ppb	Visual <100 ppb
Maximum absorbance wavelength <sup>2</sup>	515/535 nm	515/535 nm	515/535 nm
Appearance	Brick Red Cone	Brick Red Cone	Brick Red Donut
Size	1 7/8" Base 7/8" Height	3.0" Base 1 3/8" Height	4" Diameter 4" Height / 1/2" 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 1/2 hours in sea water	About 3-5 hours in sea water

Coverage of Products	One Cake	One Cone	One Donut
Light Visual	1,800 gallons	6,000 gallons	46,500 gallons
Strong Visual	180 gallons	600 gallons	4,650 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.