



Division of Kingscote Chemicals

# WATER TRACING WAX PRODUCTS FLUORESCENT FLT YELLOW/GREEN

## TECHNICAL DATA BULLETIN

Bright Dyes Yellow/Green 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 yellow/green, depending on its concentration and under UV light as lime green.

Based on biochemical oxygen demand (BOD) studies, the dye is biodegradable with 65% of the available oxygen consumed in 7 days. The dye is resistant to absorption on most suspended matter in fresh and salt water. However, compared to Bright Dyes FWT Red products it is significantly less resistant to degradation by sunlight and when used in fluoremetry, stands out much less 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 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>	490/520 nm	490/520 nm	490/520 nm
Appearance Size	Orange Cone 1 7/8" Base 7/8" Height	Orange Cone 3.0" Base 1 3/8" Height	Orange 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	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.

<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.