

WATER TRACING DYE

FLT BLUE PRODUCTS

Division of Kingscote Chemicals

TECHNICAL DATA BULLETIN

Bright Dyes FLT Blue products are specially formulated versions of food grade dye FD & C Blue. Bright Dyes FLT Blue products have been certified by NSF International to the ANSI/NSF Standard 60 for use in drinking water. This dye is used for visual detection only and cannot be seen under ultraviolet light or detected by fluorometry. However, when used visually, its color is often thought to be more acceptable to public view than the fluorescing red or yellow green Bright Dyes products. In this respect, it is sometimes used in fountains, ponds and streams for decorative effect. Visually, the dye appears as aqua to royal blue depending on its concentration and activity of the water.

Based on biochemical oxygen demand (BOD) studies, the dye is biodegradable with 77% of the available oxygen consumed in 7 days. As always the suitability of these products for any specific application should be evaluated by a qualified hydrologist or other industry professional.

General Properties	Tablets	Liquids	Powders
Detectability of active ingredient ¹	Visual <100 ppb	Visual <100 ppb	Visual <100 ppb
Maximum absorbance wavelength ²	630 nm	630 nm	630 nm
Appearance	Lt. Blue speckled 1.6cm diameter	Clear, dark blue aqueous solution	Deep violet fine powder
NSF, max use levels in potable water	2000 ppb	1200 ppb	100 ppb
Weight	1.25 gms \pm 0.05		
Dissolution Time ³	50% < 3 minutes 95% < 6 minutes		50% < 3 minutes 95% < 6 minutes
Specific Gravity		1.04 \pm 0.03 @ 25 \pm C	
Viscosity ⁴		1.8 cps	
pH		5.2 \pm 1.0 @ 25 \pm C	

Coverage of Products	One Tablet	One Pint Liquid	One Pound Powder
Light Visual	200 gallons	125,000 gallons	1,200,000 gallons
Strong Visual	20 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.

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

² Smaller peak at 405 nm.

³ (One tablet, 1 gram of powder), in flowing deionized water in a 10 gallon tank.

⁴ Measured on a Brookfield viscometer, Model LV, UL adapter, 60 rpm @ 25 \pm C.