



WATER TRACING PRODUCTS

FLUORESCENT INDUSTRIAL RED

TECHNICAL DATA BULLETIN

Bright Dyes Industrial Red Dye 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 Dye products, Industrial Red is significantly less resistant to absorption of inorganic / organic suspended matter. This limits 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 Dye 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. The use and suitability of these products should be evaluated by a qualified hydrologist or other industry professional.

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 | Dye Tablets | Dye Liquids | Dye Powders |
|--------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Detectability 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 | Dark maroon 1.6cm diameter | Deep, dark maroon aqueous solution | Dark red fine powder |
| Weight | 1.15 gms + 0.05 | n/a | n/a |
| Dissolution Time 3 | 50% < 3 minutes 95% < 6 minutes | Immediately | 50% < 3 minutes 95% < 6 minutes |
| Specific Gravity | n/a | 1.05 + 0.05 @ 25; C | n/a |
| Viscosity 4 | n/a | 1.8 cps | n/a |
| pH | n/a | 1.5 + 0.5 @ 25; C | n/a |

| Coverage of Products | One Tablet | One Pint Liquid | One Pound Powder |
|------------------------|-------------|-----------------|-------------------|
| Light Visual (100 ppb) | 604 gallons | 125,000 gallons | 1,200,000 gallons |
| Strong Visual (1 ppm) | 60 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.

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