# Norlab Inc. - *Fluorescent Red* Tracer Dye Products
# Technical Data Sheet

| General Properties | Liquids | Powders | Strips | Tablets | Tracer Dye Bag | Donuts |
|---|---|---|---|---|---|---|
| **Dye Family** | Rhodamine WT | Rhodamine WT | Rhodamine WT | Rhodamine WT | Rhodamine WT | Rhodamine WT |
| **CAS Number** | 3520-42-1 | 3520-42-1 | 3520-42-1 | 3520-42-1 | 3520-42-1 | 3520-42-1 |
| **Detection Method** | Visual, Ultraviolet, Fluoremetric Equip | Visual, Ultraviolet, Fluoremetric Equip | Visual, Ultraviolet, Fluoremetric Equip | Visual, Ultraviolet, Fluoremetric Equip | Visual, Ultraviolet, Fluoremetric Equip | Visual, Ultraviolet, Fluoremetric Equip |
| **Visual Detectability** (Note: Varies with field conditions) | Visual/UV < 100ppb | Visual/UV < 100ppb | Visual/UV < 100ppb | Visual/UV < 100ppb | Visual/UV < 100ppb | Visual/UV < 100ppb |
| **Maximun Absorbance Wavelength*** (Spectrophotometer) | 556 nm | 556 nm | 556 nm | 556 nm | 556 nm | 556 nm |
| *If checking in the visual spectrum, simply set the spectro for the "Absorbance Wavelength" for detection of peak wavelength. | | | | | | |
| **Excitation Wavelength**** | 360 nm | 360 nm | 360 nm | 360 nm | 360 nm | 360 nm |
| **Emission Wavelength**** | 577 nm | 577 nm | 577 nm | 577 nm | 577 nm | 516 nm |
| **If utilizing a black light or fluorometer, these lights will emit at 360 nm. At this "Excitation Wavelength", if the dye is present, I will give a peak at the respective "Emission Wavelength" listed. | | | | | | |
| **Dispersement Time** | Immediate | < 8 minutes | < 5 minutes | < 8 minutes | < 8 minutes | 3-5 hours |
| **Aqueous Appearance** *(Depends on concentration)* | Red to Bright Pink | Red to Bright Pink | Red to Bright Pink | Red to Bright Pink | Red to Bright Pink | Red to Bright Pink |
| **Dry Appearance** | Liquid-Dark Red | Fine Powder-Dark Red | Strip-Dark Red | Tablet-Dark Red | Fine Powder in Water Soluble Bag-dark Red | Wax Donut-Dark Red |
| **Absorption Resistance** | Most Suspended Matter | Most Suspended Matter | Most Suspended Matter | Most Suspended Matter | Most Suspended Matter | Most Suspended Matter |
| **Dosage** *(Note: Visible to Naked Eye)* | 1 oz Liquid Dye : 800 gallons | 1 lb Dye Powder : 12,000 gallons | 1 Dye Strip : 500 gallons | 1 Dye Tablet : 80 gallons | 1 Tracer Dye Bag : 3,000 gallons | 1 Dye Donut : 8,000 gallons |
| **Dosage** *(Note: Visible through Instrumentation)* | 1 oz Liquid Dye : 8,000 gallons | 1 lb Dye Powder : 120,000 gallons | 1 Dye Strip : 5,000 gallons | 1 Dye Tablet : 800 gallons | 1 Tracer Dye Bag : 30,000 gallons | 1 Dye Donut : 80,000 gallons |
| **pH** *(Note: No significant change between 8.5-11 pH)* | 10.5 +/- 0.5 @ 25° C | 10.5 +/- 0.5 @ 25° C | 10.5 +/- 0.5 @ 25° C | 10.5 +/- 0.5 @ 25° C | 10.5 +/- 0.5 @ 25° C | 8.6 +/- 0.5 @ 25° C |
| **Specific Gravity** | 1.15 +/- 0.5 @ 25° C | | | | | |
| **BOD** *(Biochemical Oxygen Demand)* **Studies** | | Dye biodegradability with 65% of the available oxygen consumed in 7 days. | | | | |

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CAUTION: As with any dye or chemical, the use of gloves & goggles is recommended when handling this product. Contact with skin may cause irritation &/or staining. Keep out of reach for children & pets.

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