

# Radglo DD-5-0954

## General information

### General description:

- Daylight and ultra-violet responsive fluorescent red tracer dye for coloration of oils.
- Soluble in organic solvents and oils.

### Applications:

- Intended to color petroleum derivatives, paraffin oils & waxes, lubricating oils & greases, industrial & technical vegetable-based oils, leak detection, refrigerators and non-destructive crack detection.

### Standard color:

Product name	Description
DD-5-0954	Red

### Packaging:

1 Metal pail = 15kg  
MOQ = 15kg

### Product features and benefits

- Cost effective tracer dye with lower detection limit than non-fluorescent counterparts.
- DD-5-0954 is compatible with lubricant and refrigerant systems giving them strong fluorescent response allowing very low final concentrations of the dye in the used oils to pin-point any present leak.
- DD-5-0954 can be used to improve the product appearance or marking for taxation purposes.
- DD-5-0954 Red might be mixed with CFS-0-06 Yellow to create intermediate shades.

1

## Technical information

### Physical properties

Appearance	Dark red oil (liquid)
Hue	Bright pinkish red
Flash point	205°C
Water content	<0,1%
Density	0,82g/cm <sup>3</sup>

### Storage & shelf life:

24 months after production date when kept in closed original packaging in a dark, dry place at ambient temperature.

### Processing

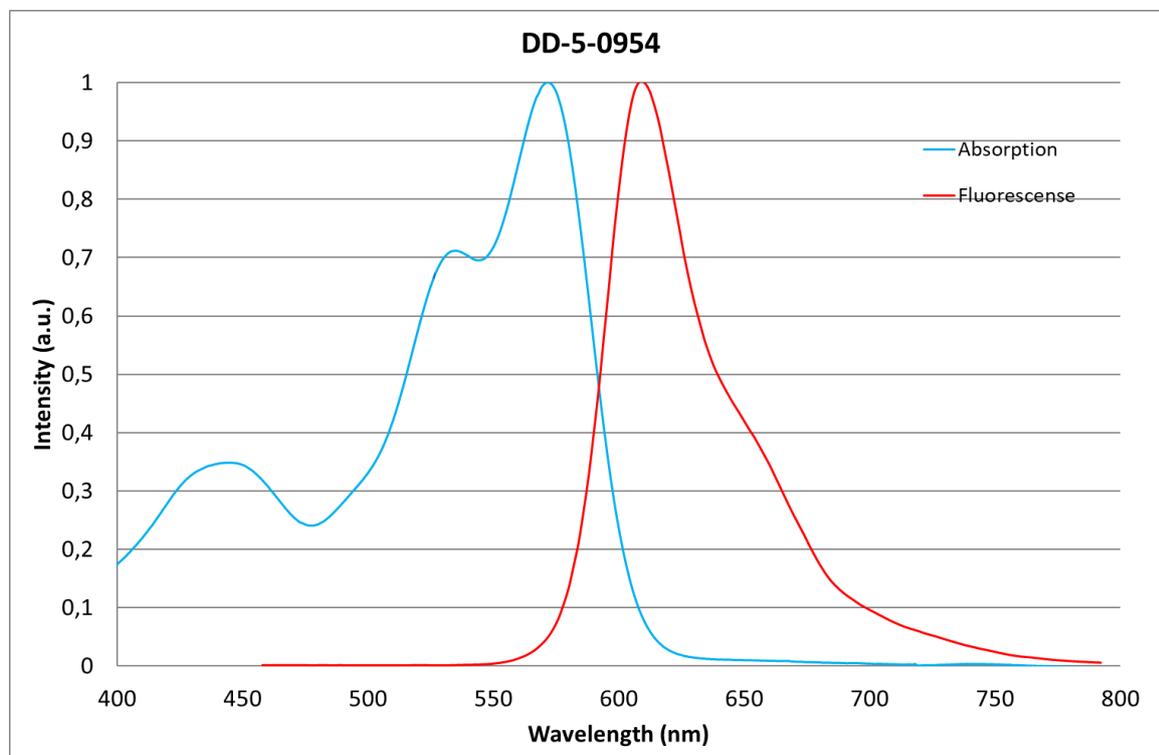
Heat stability	Not recommended for coloring plastics, but good tool to test heat stability - no considerable change in color after 5min @ 280°C in HDPE chips (0,2% load).
----------------	---

### Safety & regulatory:

Safety Data Sheet available on request.

**Absorption and Fluorescence**

 Absorption:  $\lambda$ -max (0,1% in mineral oil) = 572nm

 Fluorescence:  $\lambda$ -max (0.1% in mineral oil) = 610nm (excitation at 400nm)


As the fluorescence intensity depends on the used lamp, we recommend broad spectrum lamps, which provide visible violet and blue light as well as long wave UV light. This is due to the excitation areas of DD-5-0954 Red. Best illuminating light: 525-575nm.

**Solubility**

Fluid	Soluble
Polymerised castor oil	Yes
Ricinoleic acid	Yes
Mineral oil (Marcol 152)	Yes
Acetone	No
Ethylacetate	Yes
MMA	Yes
DIDP	Yes
White Spirit	Yes
DMF	No
Alkyd or acrylic resins	Yes
Olefins and other plastics	Yes
Refrigerator oil	Yes

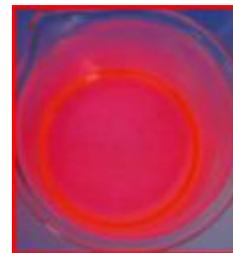
**Test method**

A concentration of 1g/100ml is dissolved in the listed fluids at room temperature to check the solubility. After stirring 30 minutes, the solubility is visually evaluated.

As a formulation contains mostly different substances, it is impossible to generalize. We recommend to check the solubility of the fluorescent tracer dye in your formulation.

**Concentration in final application**

Depending on the application, used illumination light, the background (light or dark), the used carrier (oil, solvent, wax, olefin, etc.), the recommended concentration will differ. For oil marking a final concentration of 0,03% is common. On the photo on the right a concentration of 0,1% DD-5-0954 Red in white mineral oil has been illuminated with a D65 (white daylight).



Disclaimer: Radiant Color NV has gathered the information it provides herein using appropriate methods to ensure its accuracy. Such information is true and correct to the best of Radiant Color's knowledge and belief as of the date recorded in this document. Customer acknowledges that Radiant Color may have relied on information provided by others in completing this declaration, and Radiant Color may not have independently verified such information. Customer further acknowledges, notwithstanding any other agreements to the contrary, the information provided herein is provided solely for the Customer's reference on an "AS-IS" basis, and without warranty of any kind, expressed or implied. Radiant Color hereby disclaims any and all liability associated with the Customer's use of information contained within this document.