

### **FLUORESCENT YELLOW 131SC**

Concentrated Solvent Soluble Dye

### **Description**

Fluorescent Yellow 131SC is a concentrated solvent soluble dye containing Solvent Red 175 in a high flash hydrotreated naphthenic solvent system. The product is a dark colored liquid and has been found to be completely miscible in most petroleum or organic based products. The solvent is used in the product as a viscosity depressant and standardizing agent. The product is available in 18 kilogram pails, and 173 kilogram drums.



Fluorescent Yellow 131 SC can be used for detecting oil leaks in gasoline and diesel engines as well as hydraulic oil systems. This application requires addition of the fluorescent dye to the engine oil and subsequent examination of the engine using a high intensity black light. Leaks are easily detected with this system by the intense white-yellow fluorescence of the dye. This fluorescence is readily distinguished from the natural blue fluorescence found in some oils.

# Recommended Dosage

The following recommendations are provided as a starting point for typical leak detection applications. Actual dosage will depend on the specific needs of the customer.

Hydraulic & Transmission Fluids 500 to 2000 ppm
Car Engine Oils 500 ppm
Diesel Engine Oils 700 to 2000 ppm

## Typical Physical Properties

Fluorescent Yellow 131SC Result

Density 7.6

Excitation Maximum 494 ± 5 nm (Hexane solvent)

Emission Maximum 535  $\pm$  5 nm (Hexane solvent)

Flash Point, ASTM D-3278 >85°C, 185°F
Solubility in Petroleum Products Completely Miscible

Solubility in Petroleum Products Completely Miscible These properties are typical but do not constitute specifications.

## Product Specifications

Fluorescent Yellow 131SC Result
Fluorescent Intensity 100% ± 5 % (vs. Standard)

Insolubles 0.2% Maximum

(Filter Method)

Water Content 0.5% Maximum

(Karl Fisher Method)

## Application Recommendations

Introduction of the dye into the oil can be carried out in one of two ways. Engine/Hydraulic Oil and the dye may be premixed and added to the system prior to the testing cycle or dye may be added to the system after the oil fill by adding the dye directly into the oil sump. Leakage is monitored during and after the "hotcell" test or after the dynometer test by examining the engine or hydraulic systems with a high intensity black light (100-125 W emitting at 365 nm). Leakage is readily detected by the presence of a white-yellow fluorescence caused by the presence of the dye.

## Safe Handling Information

Before using this product, consult the Safety Data Sheet (SDS) for details on product hazards, first aid measures, recommended handling precautions, recommended personal protection equipment and product storage.

**CAUTION!** Keep combustible and/or flammable products and their vapors away from heat, sparks, flames and other sources of ignition including static discharge. Processing or operating at temperatures near or above product flashpoint may pose a fire hazard. Use appropriate grounding and bonding techniques to manage static discharge hazards.

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