



Technical Data Sheet

SEALTITE FLUORESCENT YELLOW 131SC

Concentrated Solvent Soluble Dye

Description

SEALTITE 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.

SEALTITE Fluorescent Yellow 131SC 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

SEALTITE Fluorescent Yellow 131SC

	Result
Density	7.6
Excitation Maximum (Hexane solvent)	494 ± 5 nm
Emission Maximum (Hexane solvent)	535 ± 5 nm
Flash Point, ASTM D-3278	>85°C, 185°F
Solubility in Petroleum Products	Completely Miscible

These properties are typical but do not constitute specifications.

Product Specifications

SEALTITE Fluorescent Yellow 131SC

Fluorescent Intensity (vs. Standard)
Insolubles (Filter Method)
Water Content (Karl Fisher Method)

Result

100% ± 5 %
0.2% Maximum
0.5% Maximum

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 dynamometer 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.