

## BASE-COLF Background colour-Dye/Marker Analyzer for Fuels

The BAGGI<sup>®</sup> BASE instrument BACOLF offers online accurate measurements of Background Color and Dye/Marker in Jet Fuels or Diesel Fuels.



The instrument is based on a UV—Visible spectroscopy that provides high wavelength resolution. The measurement technique relies on the *Beer-Lambert* law.

This one is a relationship that relates the absorption of electromagnetic waves energy to the properties of the material through which the waves are travelling. The material (Fuel) is introduced in a sample cell of specific optical path length. The energy is transmitted to the cell via an optical fiber cable, it passes through the gas space and the residual energy is transmitted to the sensor by a second optical fiber.

The analyzer is optimized for the following measurement ranges:

- Diesel Fuels — Red Dye (ASTM D 6756) / ASTM Color (D 1500, D 6756)
- Jet Fuels — Red Dye / Saybolt Color (D 156)

### Measure range:

- Diesel Fuels:  
Red Dye (solventRed26) : 0 - 25 mg/l  
ASTM(1500/6756): 0 - 8 (dyed fuels 0 - 5)
- Jet Fuels:  
Red Dye (solventRed26) : 0.01 - 0.75 mg/l  
Saybolt Color D156 : -16 - 30

### Response time:

90% of final value in 10 sec.  
(typical)

### Services required:

Instrument Air

**Accuracy:**  
±0.5% F.S.

**Repeatability:**  
±0.1% F.S.

**Sensitivity:**  
±0.01% F.S.

CIE Diagram - 1931 2 Degree Standard Observer  
x-CIE

