

# Technical Data Sheet

## CFF-X-03

### General Description

- Ultra-violet responsive solvent soluble fluorescent dye for solvent based applications.
- Fluorescent brightener 61

### Applications

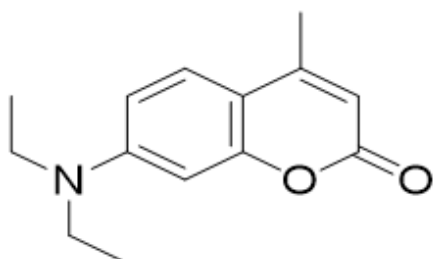
- UV Blue tracer for counterfeiting, security, leak detection, product identification.

### Product Features

- CFF-X-03 is relatively invisible in normal daylight, but produces a highly visible bright and vibrant blue color upon exposure to ultra-violet or "black" light.
- Popular for security and tracing applications like counterfeit protection, product identification and process automation.
- CFF-X-03 is completely soluble in certain plastics and solvents and will not exhibit a noticeable particle size, upon dissolution.

Physical properties	
Appearance	Yellow powder
Hue under UV light	Bright Blue
Mol. Formula	C <sub>14</sub> H <sub>17</sub> NO <sub>2</sub>
Mol. Weight	321,1
Hiding power	Transparent
Melting point	67 – 72°C

### Chemical Structure



### Standard Color

Product Name	Description
CFF-X-03	UV Blue

### Characteristics

Chemical type	Aminocoumarin
C.I. No.	Not listed
C.I. Name	FB 61
CAS	91-44-1
EINECS	202-068-9

### Packaging:

Box = 1kg  
 Box = 5kg  
 Box = 10kg  
 Box = 20kg

MOQ = 1kg

### Storage & shelf life:

120 months when kept in closed original packaging in a dry place at ambient temperature.

### Safety & regulatory:

Safety Data Sheet available on request.

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### Solubility

Solvent	Solubility
Water	0
IPA	++
Ethanol	+++
Acetone	+++
MEK	+++

Solubility	Evaluation	g/100ml
+++	High	5
++	Good	1
+	Limited	0,1
-	Low	< 0,1

### Test method

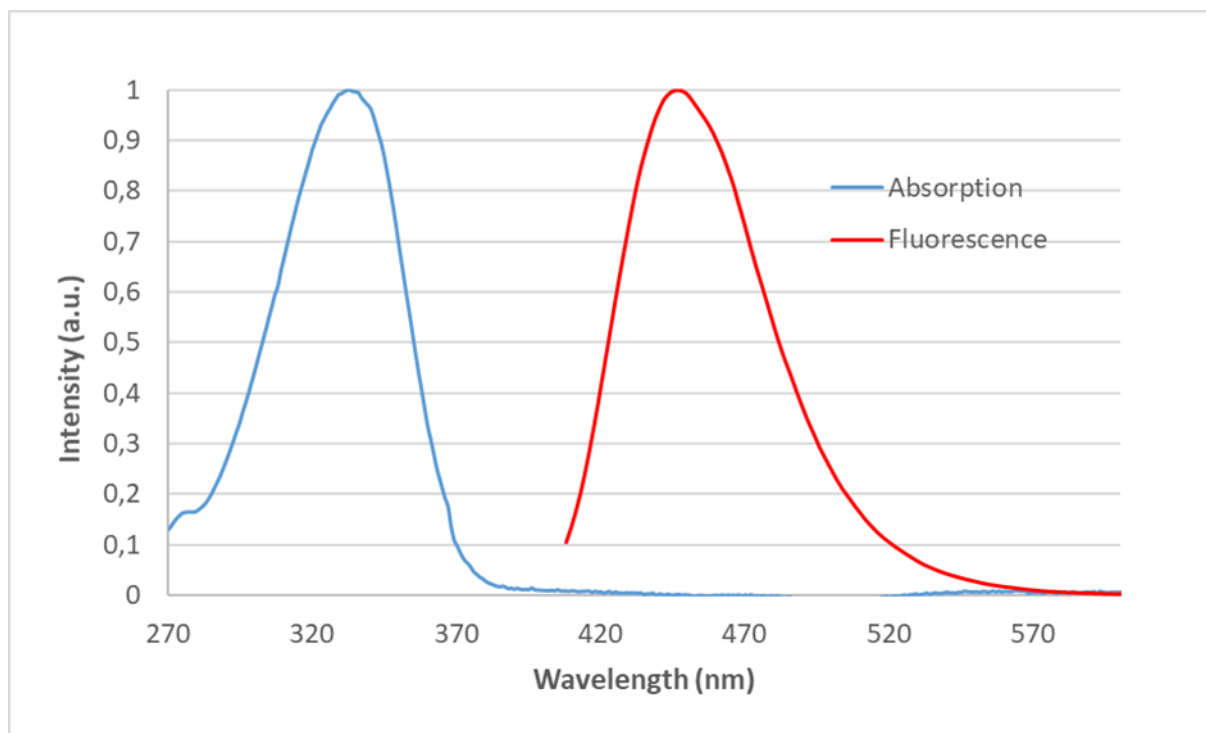
The solubility of three dye concentrations (5g, 1g and 0,1g) is tested in 100ml of the listed solvents at room temperature. After stirring 30 minutes, the solubility is visually evaluated.

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

### Absorption and Fluorescence

Absorption:  $\lambda$ -max (0,01% in H<sub>2</sub>O) = 333nm

Fluorescence:  $\lambda$ -max (0,01% in H<sub>2</sub>O) = 426nm (excitation at 350 nm)



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