

# Radglo CFF-X-02

## General information

### General description:

- Ultra-violet responsive fluorescent dye for plastic applications.
- Fluorescent brightener 184.

### Applications:

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

- Radglo CFF-X-02 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.
- Radglo CFF-X-02 is completely soluble in certain plastics and solvents and will not exhibit a noticeable particle size, upon dissolution.

### Standard color:

Product name	Description
CFF-X-02	UV Blue

### Characteristics:

Chemical type	Benzoxazol
C.I. N°	Not listed
C.I. Name	FB 184
CAS	7128-64-5
EINECS	230-426-4

### Packaging:

1 box = 1kg  
 1 box = 5 kg  
 1 box = 10 kg  
 1 box = 20kg  
 MOQ = 1kg

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## Technical information

Physical properties	
Appearance	Yellow Powder
Hue under UV light	Bright Blue
Mol. Formula	C <sub>26</sub> H <sub>26</sub> N <sub>2</sub> O <sub>2</sub> S
Mol. Weight	430,6
Hiding power	Transparent
Melting point	195 – 205°C

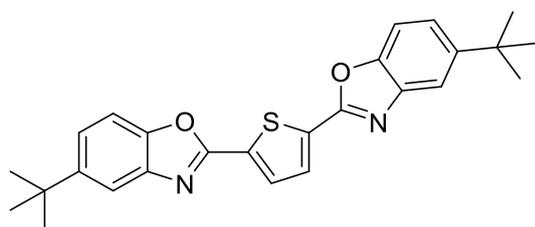
### Storage & shelf life:

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

### Safety & regulatory:

Safety Data Sheet available on request.

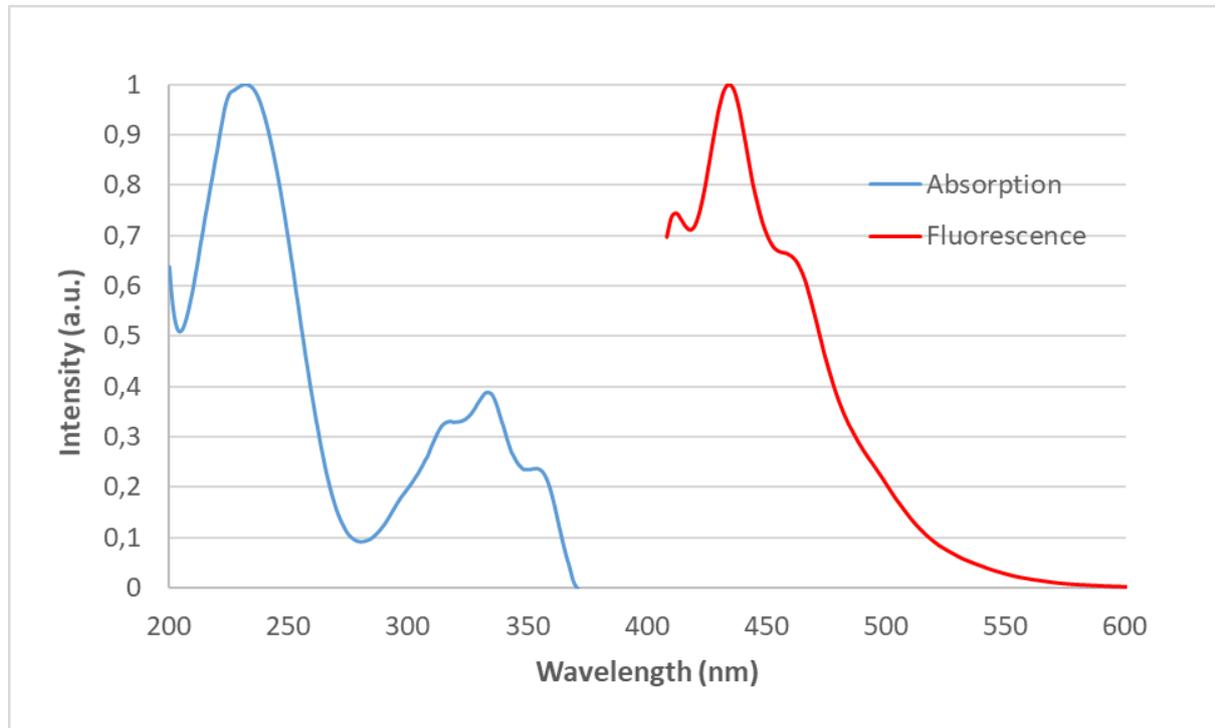
### Chemical Structure:



### Absorption and Fluorescence

Absorption:  $\lambda$ -max (0.005% in ethanol) = 232nm

Fluorescence:  $\lambda$ -max (0.005% in ethanol) = 434nm (excitation at 350nm)



### Solubility

Solvent	Solubility
Acetone	-
Ethylacetate	-
MMA	++
DIDP @RT	-
DIDP @100°C	+++
DMF	+
Water	0

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 to check the solubility of the fluorescent dye in your formulation.