Radglo CFF-X-01

General information

General description:

- Ultra-violet responsive water soluble fluorescent dye for water based formulations.
- Fluorescent brightener 220.

Applications:

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

- Radglo CFF-X-01 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-01 is completely water soluble and will not exhibit a noticeable particle size, upon dissolution.
- For aqueous formulations, the use of preservatives is recommended. The right preservative package (combination of bactericides and fungicides) should provide reliable, highly effective control of microorganisms in the intended formulation.

Standard color:

Product name	*Description*
CFF-X-01	UV Blue

Characteristics:

Chemical type	Stilbene
C.I. N°	40623
C.I. Name	FB 220
CAS	16470-24-9
EINECS	240-521-2

Packaging:

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

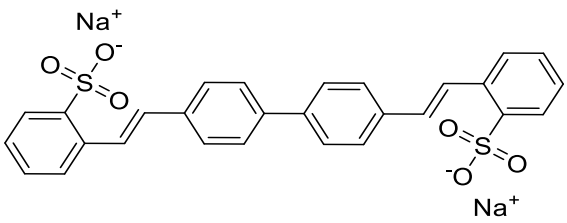
Technical information

Physical properties	
Appearance	Yellow powder
Hue under UV light	Bright Blue
Mol. Formula	$C_{40}H_{44}N_{12}O_{16}S_4Na_4$
Mol. Weight	1168,2
Hiding power	Transparent
Melting point	>300°C
pH range	4 - 10

Storage & shelf life:
120 months after production date when kept in closed original packaging in a dry place at ambient temperature.

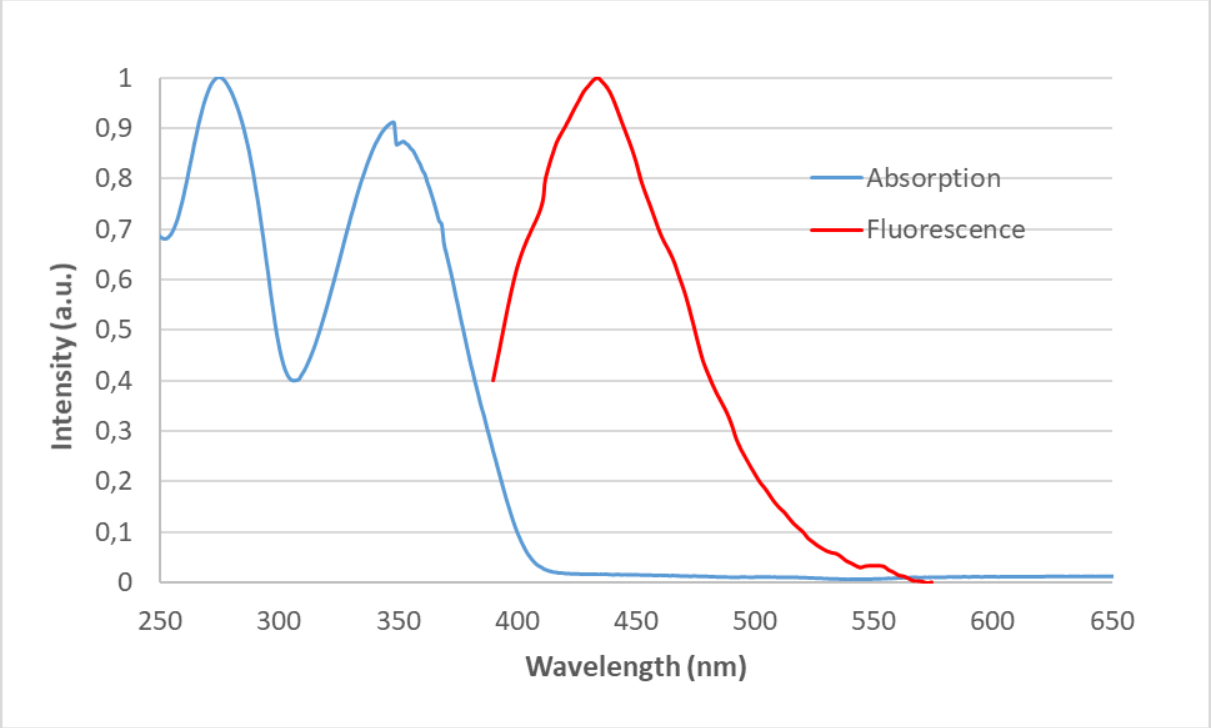
Safety & regulatory:
Safety Data Sheet available on request.

Chemical Structure:



Absorption and Fluorescence

Absorption: λ-max (0,01% in H_2O) = 275nm
Fluorescence: λ-max (0,01% in H_2O) = 433nm (excitation at 350 nm)



Solubility

Solvent	Solubility
Water	+++
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 to check the solubility of the fluorescent dye in your formulation.