

# **Technical Data Sheet**

# **CFF-X-02**

# **General Description**

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

#### **Applications**

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

#### **Product Features**

- 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.
- CFF-X-02 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	$C_{26}H_{26}N_2O_2S$	
Mol. Weight	430,6	
Hiding power	Transparent	
Melting point	195 – 200°C	

Standard Color		
Product Name	Description	
CFF-X-02	UV Blue	

Characteristics		
Chemical type	Benzoxazol	
C.I. No.	Not listed	
C.I. Name	FB 184	
CAS	7128-64-5	
EINECS	230-426-4	

# Packaging:

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

MOQ = 1kg

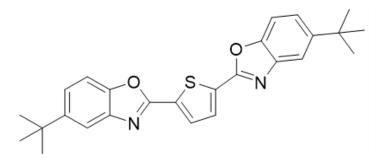
# Storage & shelf life:

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

#### Safety & regulatory:

Safety Data Sheet available on request.

# **Chemical Structure**



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# Solubility

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

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

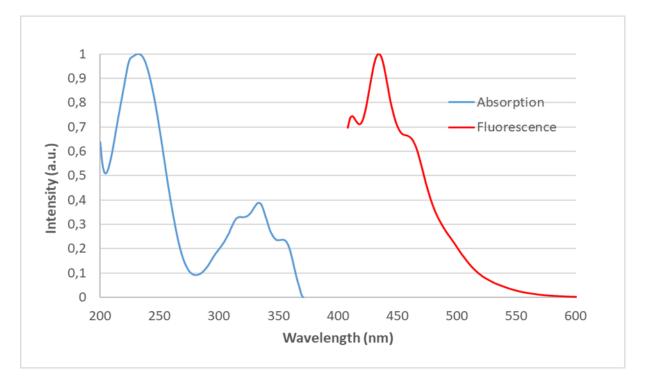
# **Test method**

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 checking the solubility of the fluorescent dye in your formulation.

# **Absorption and Fluorescence**

Absorption:  $\lambda$ -max (0,01% in H<sub>2</sub>O) = 232nm Fluorescence:  $\lambda$ -max (0,01% in H<sub>2</sub>O) = 434nm (excitation at 350 nm)



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