

# Product Data Sheet

**Date of Issue: 5 Oct 2021**

## 1. Product Information

- Product Name : Flamma® 488 Vinylsulfone
- Catalog Number : CWA1002
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Orange Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 488
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Weight : 653.04 g/mol
- Excitation <sub>Max</sub> : 495 ± 3 nm
- Emission <sub>Max</sub> : 519 ± 4 nm
- Extinction Coefficient : ≥ 40,000 /cm·M

## 3. Description

Flamma® Fluors 488 Vinylsulfone is pH insensitive reactive form of bright green dye that used to generate a stable fluorescence signal in bioimaging. Vinylsulfone reactive group, developed by BioActs' leading technology, is stable in a wide range of pH and at the high temperature. The maxima of Ex/Em values are at 495/519 nm, similar to that of Alexa 488. Flamma 488 might be excited using 488 nm laser line and displays excellent optical property. Flamma 488 can be conjugated to low-abundance of biomolecules with great sensitivity and high d/P ratio, enabling sensitive detection. Vinylsulfones readily react with primary amines of amino-modified oligonucleotides or of proteins to form a stable amino linkage between dye and the biomolecule. We offer Flamma Fluors 488 Vinylsulfone for labeling of antibodies, peptides, proteins, ligands and amplification substrates optimized for cellular labeling and detection.