

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : Flamma® 552 Vinylsulfone
- Catalog Number : PWA1122
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Red Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 552-
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula :  $C_{38}H_{51}N_3O_9S_3^-$
- Molecular Weight : 790.02 g/mol
- Excitation  $_{Max}$  :  $550 \pm 3$  nm
- Emission  $_{Max}$  :  $564 \pm 4$  nm
- Extinction Coefficient :  $\geq 136,000$  /cm·M

## 3. Description

Flamma® Fluors 552 Vinylsulfone is pH insensitive reactive form of bright yellow 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 550/565 nm, similar to that of Alexa 555, DyLight 549 ATTO 550 and Cy 3. Flamma 552 might be excited using 543, 546 or 555 nm laser line and displays excellent optical property. Flamma 552 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 552 Vinylsulfone for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and detection.