

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : ICG Vinylsulfone
- Catalog Number : POA1616
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : ICG
- Reactive Group : Vinylsulfone
- Reactive Toward : Primary amine on proteins and ligands, amine-modified oligonucleotides
- Molecular Formula :  $C_{49}H_{57}N_3O_6S_2$
- Molecular Weight : 848.3 g/mol
- Excitation  $_{Max}$  :  $785 \pm 3$  nm
- Emission  $_{Max}$  :  $812 \pm 4$  nm
- Extinction Coefficient :  $\geq 218,000$  /cm·M

## 3. Description

ICG Vinylsulfone is Vinylsulfone is pH insensitive amine-reactive near infrared (NIR) fluorescent dye and used to generate a stable fluorescence signal in bioimaging. NIR fluorescence allows to observe the deep image from the surface of skin and being utilized in a wide range of research fields. 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 785/812 nm. ICG might be excited using 750-800 nm laser line or LED and displays excellent optical property. Vinylsulfones readily react with primary amines of amino-modified oligonucleotides or of proteins to form a stable amino linkage between dye and the biomolecule. BioActs provides ICG dye for various biological research and medical diagnostics. We offer ICG Vinylsulfone for labeling of antibodies, peptides, proteins, ligands, and amplification substrates optimized for cellular labeling and NIR imaging.