

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : Flamma® 749 Amine
- Catalog Number : PWE1301
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Green Solid
- Storage Conditions : Protect from Light at 4 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 749
- Reactive Group : Amine
- Reactive Toward : Carboxyl group
- Molecular Formula :  $C_{39}H_{52}N_4O_7S_2$
- Molecular Weight : 752.98 g/mol
- Excitation<sub>Max</sub> :  $749 \pm 3$  nm
- Emission<sub>Max</sub> :  $774 \pm 4$  nm
- Extinction Coefficient :  $\geq 200,000$  /cm·M

## 3. Description

Flamma® Fluors 749 Amine is inactive form of near infrared (NIR) fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. The primary amine is attached to Flamma 749 through a spacer. The maxima of Ex/Em values are at 749/774 nm, similar to that of Alexa 750, Cy7, IRDye 750 and DyLight 755. Flamma 749 might be excited using 750 nm laser line or dye-pumped laser excitation and the emission occurs at biological tissue permeable NIR region. Flamma® Fluors 749 amine can be coupled with carboxylic acids at small molecules or on biomolecules by standard amide bond coupling conditions or can be utilized as a reference standard for dye-conjugates.