

# Product Data Sheet

Date of Issue: 7 Oct 2021

## 1. Product Information

- Product Name : Flamma® 675 Dichlorotriazine
- Catalog Number : PWR2515
- Packing Unit : 1 mg / 5 mg / 25 mg
- Appearance : Blue Solid
- Storage Conditions : Protect from Light at -20 °C

## 2. Additional Information

- Fluorophore Label : Flamma® 675
- Reactive Group : Dichlorotriazine
- Reactive Toward : Hydroxyl group
- Molecular Formula :  $C_{48}H_{53}Cl_2N_7O_{13}S_4$
- Molecular Weight : 1135.14 g/mol
- Excitation  $_{Max}$  :  $675 \pm 3$  nm
- Emission  $_{Max}$  :  $691 \pm 4$  nm
- Extinction Coefficient :  $\geq 144,000 /cm \cdot M$

## 3. Description

Flamma® Fluors 675 Dichlorotriazine is a hydroxyl reactive near infrared (NIR) fluorescent dye induced from benzindocyanine structure and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 675/691 nm, similar to that of Alexa 680, Cy5.5, IRDye 680LT and DyLight 680. Flamma 675 might be excited using 633 nm laser line and the emission occurs at biological tissue permeable NIR region. Hydroxyls irreversibly displace one of chlorines at triazine ring to yield an aryl ether linkage. Dichlorotriazines are among the few reactive groups that are reported to react directly with polysaccharides and other alcohols in aqueous solution, provided that the pH is >9 and other nucleophiles are not present. We offer Flamma Fluors 675 dichlorotriazine for labeling of polysaccharides and alcohols on biomolecules for cellular labeling and detection.