

## **Product Data Sheet**

Date of Issue: 7 Oct 2021

## 1. Product Information

• Product Name : Flamma® 648 Dichlorotriazine

· Catalog Number: PWR2215

• 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® 648

• Reactive Group : Dichlorotriazine

· Reactive Toward : Hydroxyl group

• Molecular Formula :  $C_{40}H_{49}Cl_2N_7O_7S_2$ 

• Molecular Weight: 874.9 g/mol

• Excitation  $_{\text{Max}}$ : 648 ± 3 nm

• Emission  $_{\text{Max}}$ : 663 ± 4 nm

• Extinction Coefficient :  $\geq 200,000 / \text{cm} \cdot \text{M}$ 

## 3. Description

Flamma® Fluors 648 Dichlorotriazine is a hydroxyl reactive far-red fluorescent dye induced from cyanine structure and used to generate a stable fluorescence signal in bioimaging. The maxima of Ex/Em values are at 648/663 nm, similar to that of Alexa 647, Cy5 and DyLight 650. Flamma 648 might be excited using 593 or 633 nm laser lines and displays excellent optical property. 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 648 dichlorotriazine for labeling of polysaccharides and alcohols on biomolecules for cellular labeling and detection.