

# Technical Data Sheet

Product Code: **IR Dye 1410**

Product Description: **973nm NIR Dye**

## Properties

Appearance: **green free flowing powder**

Melting Point: **100°C – 101°C**

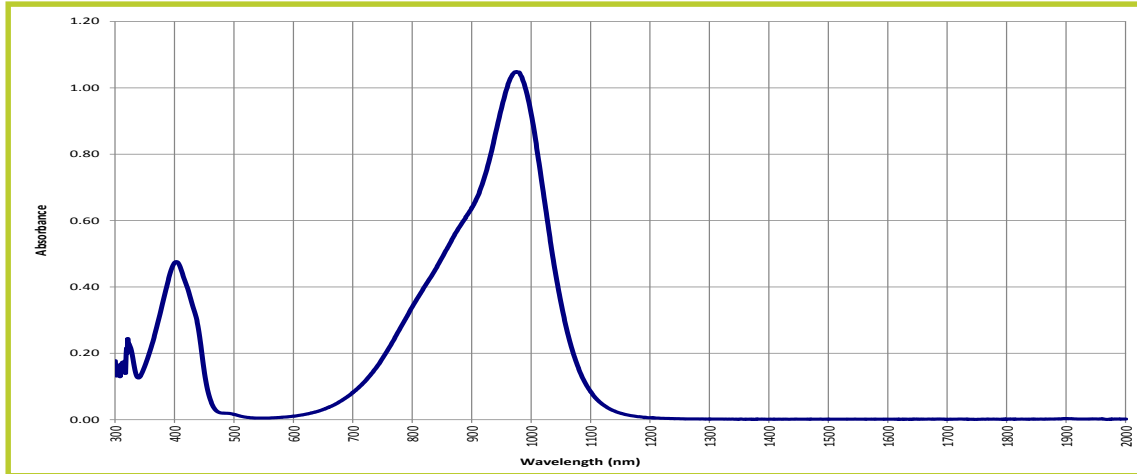
Lambda Max: **973 nm**

Absorptivity: **72.8 (L g<sup>-1</sup> cm<sup>-1</sup>)**

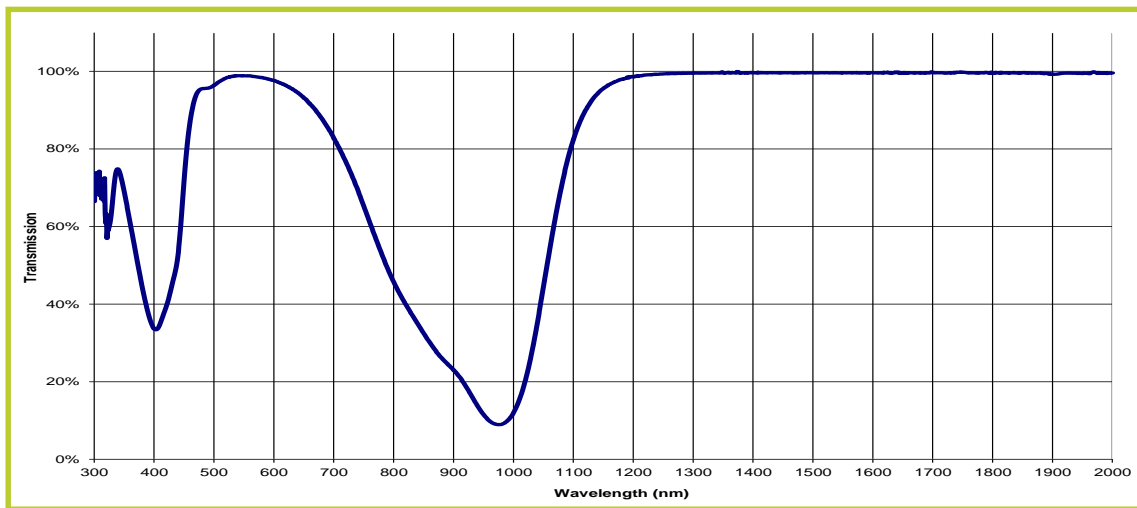
Solubility (grams/100 grams of solvent):

**MEK = 6.5, Et Acetate = 2.4, THF = 6.2, Cyclohexanone = 6.5**

**Absorption Curve**



**Transmission Curve**



Due to its' excellent balance of properties, **IR Dye 1410** finds use in a broad range of applications where the absorption of Infrared light, and the transmission of Visible light is important:

**Acrylic Infrared Filters** – IR Dye 1410 has excellent solubility in PMMA and provides excellent absorption of infrared energy, as well as excellent transmission of visible light

**Laser Eye Protection** – The intense absorption of near infrared energy makes IR Dye 1410 a candidate for use Laser Protective Eyewear. The excellent transmission of visible light is an important added benefit in Laser Eye Protection applications.

**Inks and Coatings** – Due to its' excellent solubility in a broad range of organic solvents, including methanol, IR Dye 1410 finds use in applications where the absorption of Infrared energy is needed in inks and coatings. These applications range from heat shielding window films to security inks.



**Adam Gates & Company**