

Technical Data Sheet

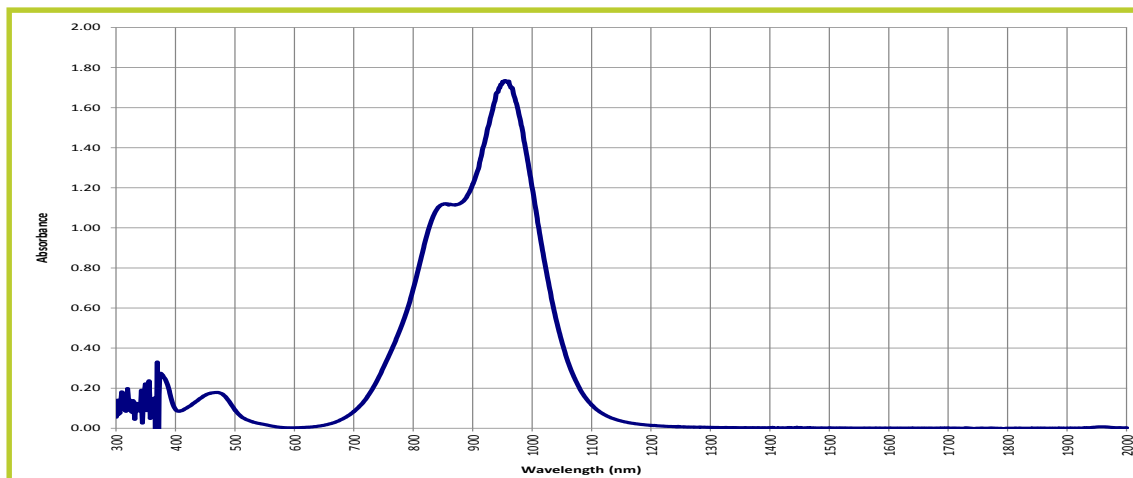
Product Code: **IR Dye 1420**

Product Description: 911nm NIR Dye

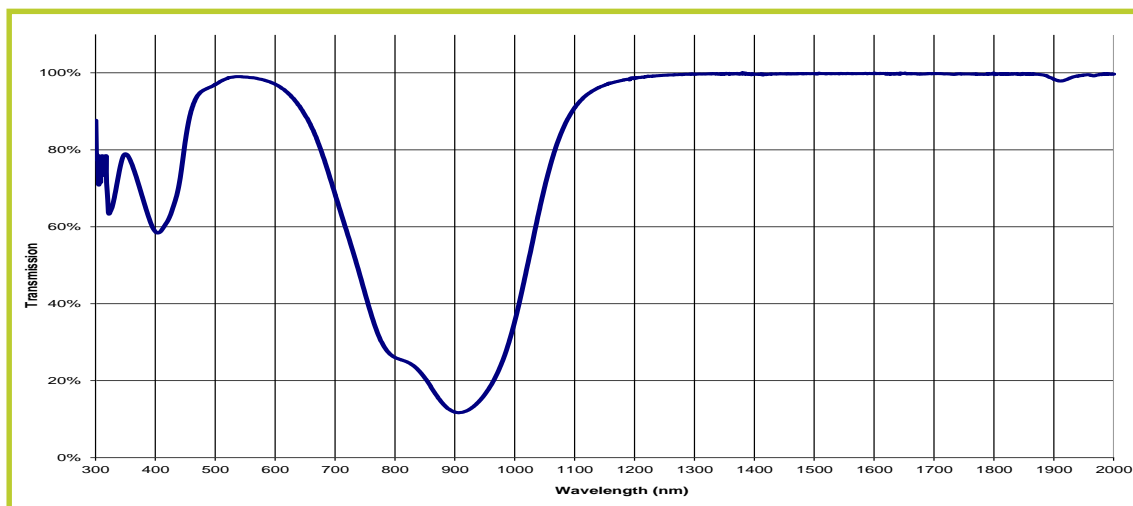
Properties

Appearance: **green free flowing powder**
Melting Point: **149°C – 150°C**
Lambda Max: **911 nm**
Absorptivity: **93 (L g⁻¹ cm⁻¹)**
Solubility (grams/100 grams of solvent):
Acetone = 1.7, MEK 6.1, Et Acetate = 1.3,
THF = 6.5, Cyclohexanone = 6.5

Absorption Curve



Transmission Curve



Due to its' excellent balance of properties, **IR Dye 1420** finds use in a broad range of applications where the absorption of Infrared light, and the transmission of Visible light is important:

Welding Eye Protection – IR Dye 1420 has sufficient thermal stability to be processed into polycarbonate Welding Protective Eyewear. Due to Its' consistently high absorptivity less is needed than with competitive dyes.

Laser Eye Protection – The broad absorption across the near infrared region, makes IR Dye 1420 a candidate for broad band 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 1420 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