

# Technical Data Sheet

Product Code: **IR Dye 3138**

Product Description: 923nm NIR Dye

## Properties

Appearance: **brown free flowing powder**

Melting Point: **311°C – 316°C**

Lambda Max: **923 nm**

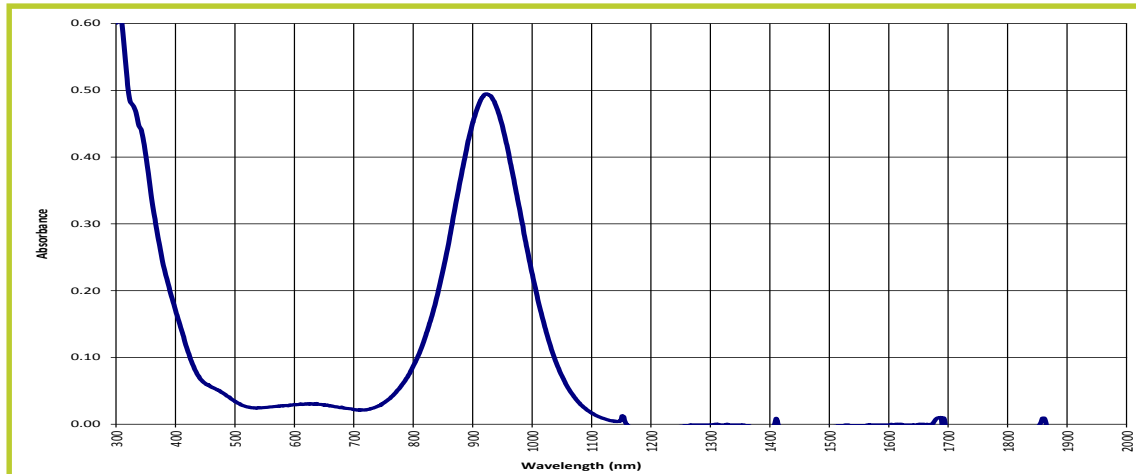
Absorptivity: **54.8 (L g<sup>-1</sup> cm<sup>-1</sup>)**

Solubility (grams/100 grams of solvent):

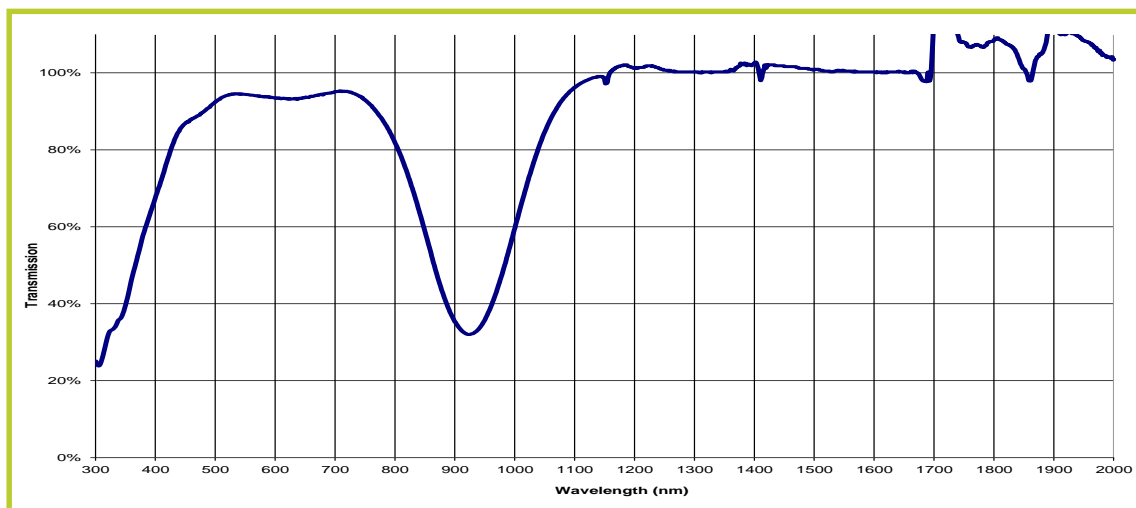
**MEK = 0.25, Xylene = 2.30,**

**Cyclohexanone = 1.81, THF = 4.54**

Absorption Curve



Transmission Curve



Due to its' excellent balance of properties, **IR Dye 3138** finds use in a broad range of applications where the absorption of Infrared light, and the transmission of Visible light is important:

**Increased Thermal Stability** – IR Dye 3138 which has increased thermal stability, allowing it to be used in lower melt flow polycarbonate, thereby imparting greater impact strength to the molded part.

**Excellent Light Properties:** IR Dye 3138 can withstand long periods of exposure to sunlight without addition UV protection.

**Suitable for Injection Molding:** The excellent thermal stability of IR Dye 3138 means that it can be injection molded into low flow polycarbonate.

**Fewer Rejected Parts** – The improved thermal stability of IR Dye 3138 means that there is less chance of it “burning off”.



Adam Gates & Company