

## Spin-coating OLED Fluid Product Data Sheet

Version 1.0

Organic light emitting diode (OLED) emissive layer that can be deposited by spin-coating methodology. It can be spin coated onto indium tin oxide (ITO), or onto or poly(3,4-ethylenedioxythiophene) poly(styrenesulfonate) (PEDOT:PSS).

### Benefits Of Spin-Coating Fluid

1. Low cost
2. Film thickness as low as 10nm
3. Works with OLED Development Kit



### How Spin Coated OLEDs Work

This solution is the active portion for use in a multi-layer organic electronic device, wherein the active portion is sandwiched between the anode and cathode layers. The light emitting crystalline material in solution results in significantly improved uniformity of light dispersion from the device. The crystalline structure is within a volatile solvent carrier. The carrier very quickly evaporates during the spin-coating process, leaving a uniform film on the substrate.

Spin coating is a means of depositing a thin film, on a flat substrate, that is uniform across its surface. The substrate is spun at high speed in a horizontal plane. The fluid is deposited whilst the substrate is spinning and is spread across the substrate by centrifugal force.

The thickness of the film on the substrate depends on a number of parameters:

1. Rotational speed of spin-coater
2. Spin time
3. Fluid's volatility
4. Fluid's viscosity
5. Surface wetting on substrate
6. Fume extraction
7. Temperature



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