



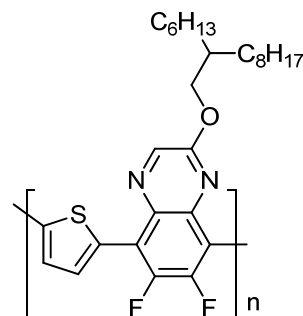
Luminescence Technology Corp.

A Low Cost and High Performance Polymer Donor Material for Polymer Solar Cells

Product Specifications

LT-S9435 PTQ10

Name.	Poly[(thiophene)-alt-(6,7-difluoro-2-(2-hexyldecyloxy)quinoxaline)]
Grade	$M_w > 10,000$ (GPC)
Formula	$C_{28}H_{36}F_2N_2OS$
Absorption	A strong Absorption from 450 to 620 nm (in $CHCl_3$ and film)
HOMO/LUMO	-5.54 eV/ -2.98 eV



* Reference: NATURE COMMUNICATIONS | (2018), 9(1), 1-10

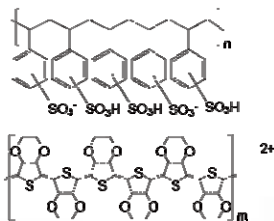
Features

- The devices of PTQ10 obtained an impressive efficiency of 12.7% as donor, and the efficiency of the inverted structured PTQ10-based device also reaches 12.13%.
- The as-cast devices also demonstrate a high efficiency of 10.41% and the devices exhibit insensitivity of active layer thickness from 100 nm to 300 nm.
- The PTQ10 will be a promising polymer donor for commercial application of polymer solar cells (PSCs) for high efficiency, high stability, and low cost.

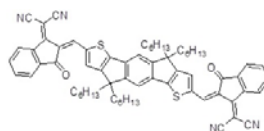
Device Application

The PSCs Device:

ITO/ PEDOT:PSS/ PTQ10:IDIC/ PDINO/ Al.



LT-PS001 PEDOT:PSS
Al = LT-E005



LT-S9279 IDIC

Materials are used by qualified for testing and research only, there are not guaranteed in patent contention by customer use.