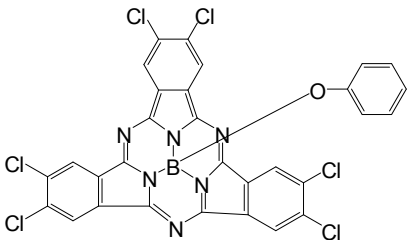
Lumtec Luminescence Technology Corp.

# Solution-processed boron subphthalocyanine derivatives as acceptors for organic bulkheterojunction solar cell

## Product Specifications

### LT-S9181 PhO-BsubPc



| | |
|---|---|
| **CAS No.** | 1309390-01-9 |
| **Grade** | > 99% (HPLC) |
| **Formula** | $C_{30}H_{11}BCl_6N_6O$ |
| **Molecular Weight** | 694.98 g/mole |
| **Absorption** | 267, 318, 569 nm (in $CHCl_3$) |
| **HOMO/LUMO** | -5.8eV/-3.0eV |

*Reference : Journal of Materials Chemistry A: Materials for Energy and Sustainability (2015), 3(14), 7345-7352*

## Features

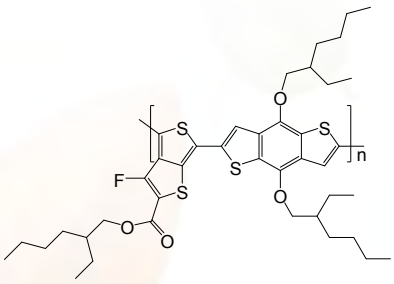
- Solution-processed bulk heterojunction devices from subphthalocyanine derivatives as the acceptor component.
- The high solubility of the SubPC derivatives facilitated the formation of efficient donor/acceptor networks and provided power conversion efficiencies of 0.4% with MEH-PPV, 1.1% with P3HT and 3.5% with PTB7.
- Solution-processable SubPC are a promising alternative to fullerenes for polymer solar cell.

## Device Application

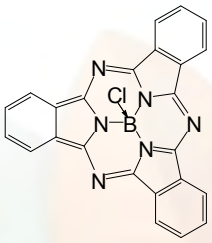
**The Best Device :**

ITO/PEDOT:PSS/PTB7: PhO-BsubPc/Ca(20 nm)/Al(100 nm)

Related products from Lumtec :



LT-S9050 PTB7



LT- S943 SubPC

Al

LT-E005 Al



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