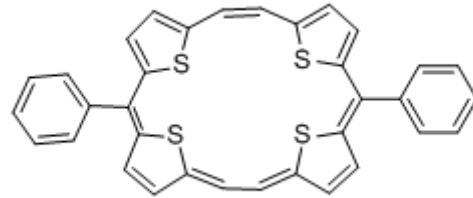


# Charge-Transfer Complex Crystal Based on Extended- $\pi$ -Conjugated Acceptor and Sulfur-Bridged Annulene: Charge-Transfer Interaction and Remarkable High Ambipolar Transport Characteristics

## Product Specifications

### LT-S9553 DPTTA

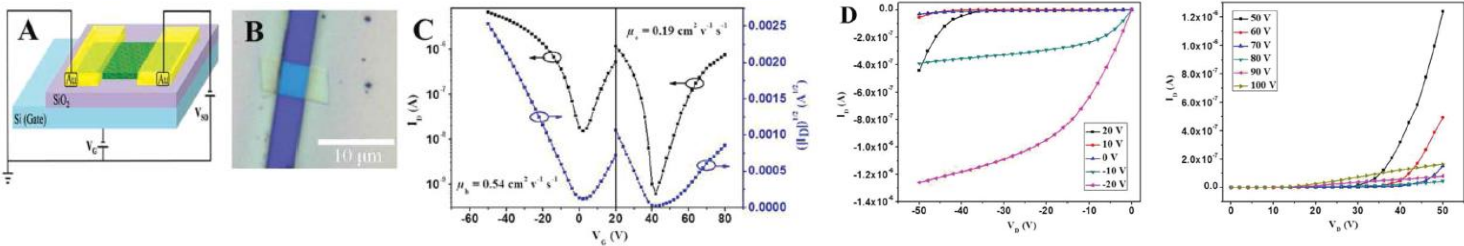
Grade	>99%(HPLC)
Formula	C <sub>34</sub> H <sub>22</sub> S <sub>4</sub>
UV	319, 401 nm (Toluene)
HOMO/LUMO	-4.42/-2.51 eV
M.W.	558.80 g/mole



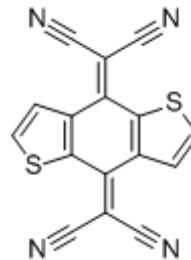
\*Reference: *Adv. Mater.* 2014, 26, 4093–4099

## Features

- In this paper, They have successfully obtained a **DPTTA**-based charge-transfer complex with DTTCNQ and investigated its charge-transport properties.
- Single-crystal field-effect transistors based on this charge-transfer complex exhibits remarkably ambipolar behavior with a high hole mobility of  $0.77 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$  and electron mobility of  $0.24 \text{ cm}^2 \text{ V}^{-1} \text{ s}^{-1}$  in ambient atmosphere.



## Related products from Lumtec:



LT-S9174 DTTCNQ

