

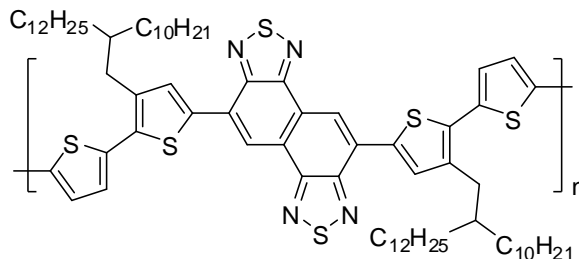


## Efficient Inverted Polymer Solar Cells Employing Favourable Molecular Orientation.

### Product Specifications

**LT-S9271 PNTz4T**

<b>Name.</b>	Poly[naphtho[1,2-c:5,6-c']bis[1,2,5]thiadiazole-5,10-diyl[3,3'''-bis(2-decyltetradecyl)[2,2':5',2'':5'',2'''-quaterthiophene]-5,5'''-diyl]]
<b>CAS No.</b>	1357999-94-0
<b>Grade</b>	M <sub>w</sub> > 30,000 (GPC)
<b>Formula</b>	(C <sub>74</sub> H <sub>106</sub> N <sub>4</sub> S <sub>6</sub> ) <sub>n</sub>



\* Reference: NATURE PHOTONICS | VOL 9 | JUNE 2015.

### Features

- The structure shows that high efficiencies of ~10% can be obtained using the crystalline polymer PNTz4T single-junction inverted cells with a thick active layer having a thickness of ~300 nm, which results in a reduction in charge recombination and efficient charge transport.

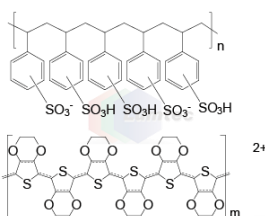
### Device Application

#### The Device:

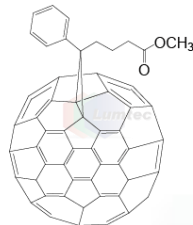
ITO/ PEDOT:PSS/ PNTz4T:PC61BM or PC71BM/ LiF/ Al

#### The Device:

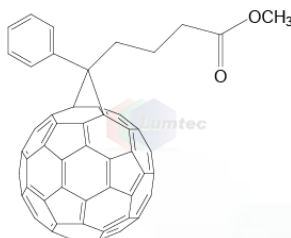
ITO/ ZnO/ PNTz4T:PC61BM or PC71BM/ MoOx/ Ag



LT-PS001 PEDOT:PSS



LT-S923 PC71BM



LT-S905 PC61BM

LiF

LT-E001 LiF

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

Head office : 31F-5, No. 99, Sec. 1, Xintai 5<sup>th</sup> Rd., Xizhi, New Taipei City 22175, Taiwan, R.O.C., TEL : +886-2-2697-5600, FAX : +886-2-2697-5601.

Factory I : 2F, No. 21, R&D Road II, Science-Based Industrial Park, Hsin-Chu 30076, Taiwan, R.O.C., TEL : +886-3-666-3188, FAX : +886-3-666-9288.

總公司 : 22175 新北市汐止區新台五路一段 99 號 31 樓之 5, TEL : 02-2697-5600, FAX : 02-2697-5601.

新竹廠 : 30076 新竹科學工業區研發二路 17 號 2 樓, TEL : 03-666-3188, FAX : 03-666-9288.

E-mail : [sales@lumtec.com.tw](mailto:sales@lumtec.com.tw) ; Web : <http://www.lumtec.com.tw>