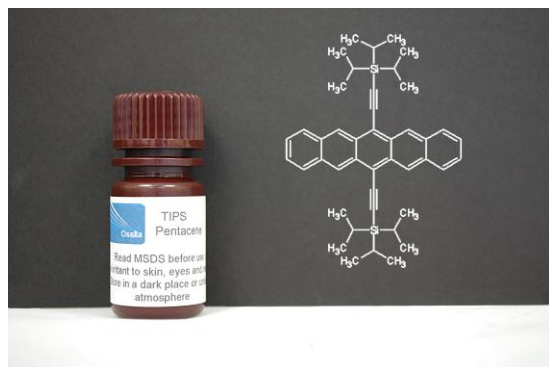


## TIPS Pentacene

6,13-bis(triisopropylsilylethynyl)pentacene commonly known as TIPS-pentacene.



A high purity TIPS-pentacene for use in organic field-effect transistors (OFETs).

In stock for immediate delivery to academic institutions in Europe and selected other geographical areas outside of North America.

TIPS pentacene has become widespread as a high performance small molecule for OFET applications with a mobility in excess of 1 cm<sup>2</sup>/Vs having been achieved in the literature. It has excellent solubility in a range of common organic solvents and a good ambient stability making it easy to process into devices. This Ossila TIPS-pentacene has been produced with a purity of >99.5% and trace metal below 5 PPM.

### Generic Properties

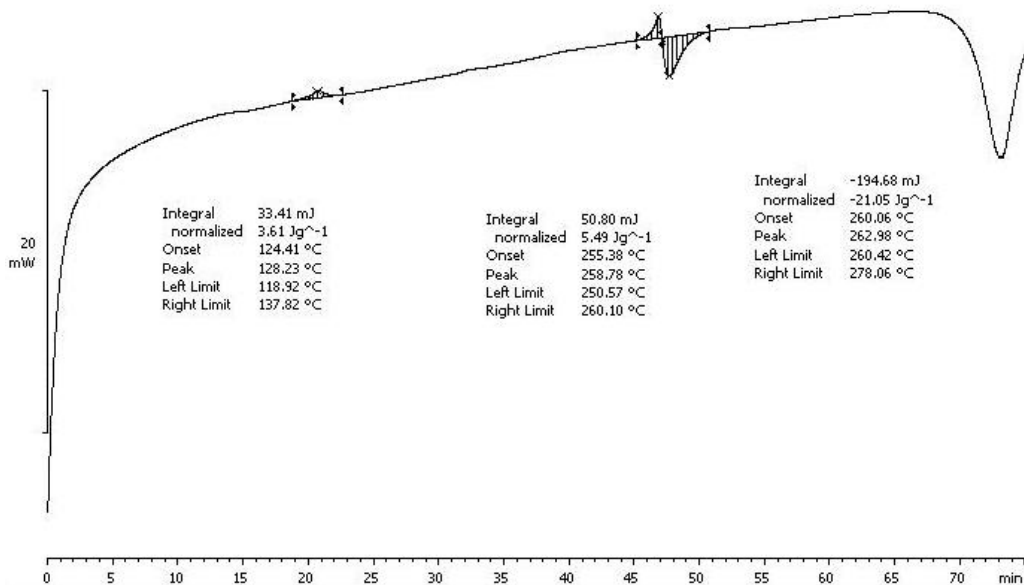
Appearance	Dark Blue Solid
Molecular Formula	C <sub>44</sub> H <sub>54</sub> Si <sub>2</sub>
Molecular Weight	639.07
Solvents	Anisole, butylbenzene, chlorobenzene, chloroform, dichlorobenzene, tetrahydrofuran, toluene, xylene
Recommended solvent	Toluene
Recommended concentration	10 mg/ml (drop cast / spin cast)

### Batch Specific Properties

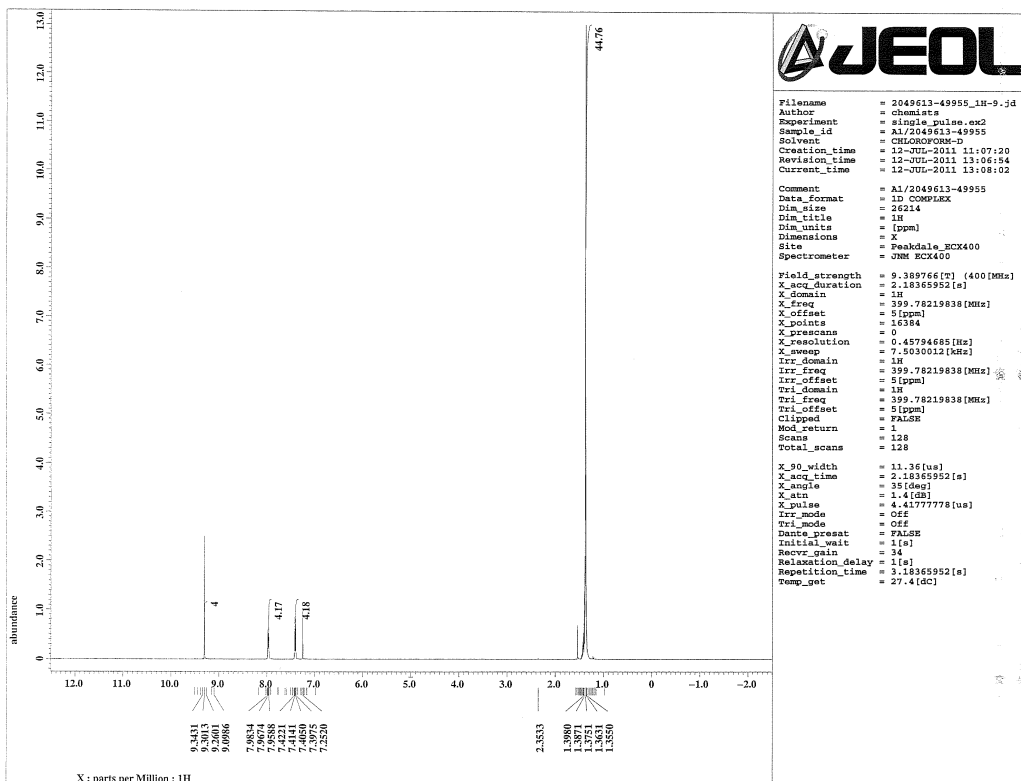
Batch Number	49955
Purity (HPLC)	>99.5%
Trace metal analysis (ICP OES)	Na, K, Sn, Mg, Ca, Zn, Al, Ba all < 5 PPM
DSC Endotherm melt onset	255 °C
DSC Exotherm onset	260 °C

# TIPS Pentacene

PD0322, 205-114-3, MS, 06.07.2011 13:09:56  
 PD0322, 205-114-3, MS, 9.2500 mg



DSC trace

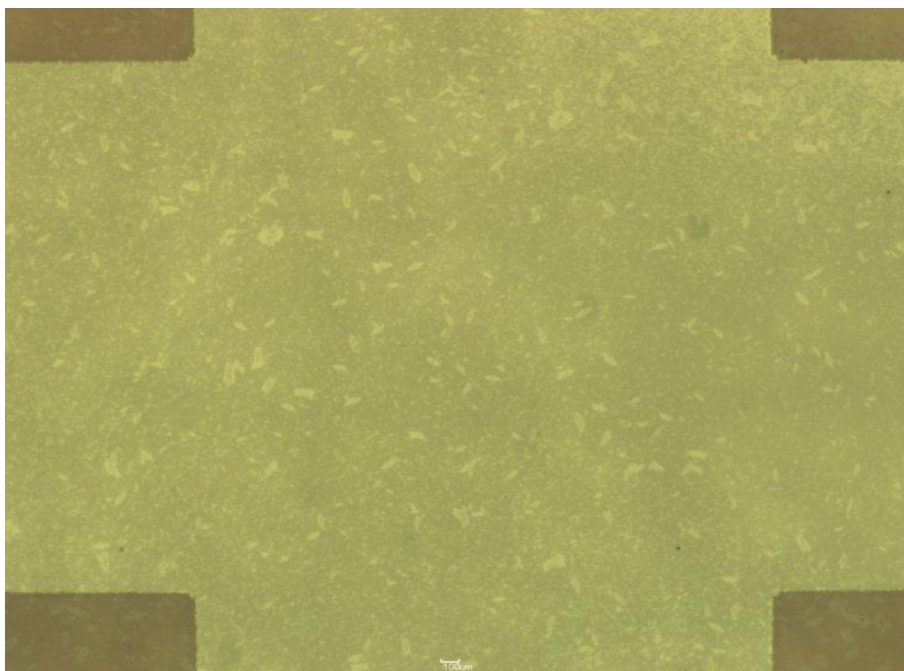


NMR trace

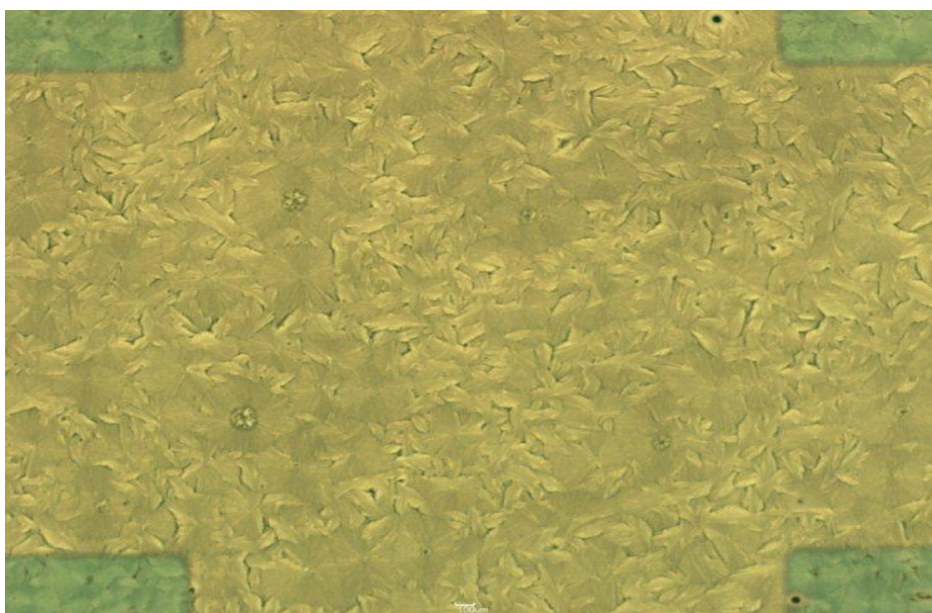
# TIPS Pentacene

## Crystallisation Images

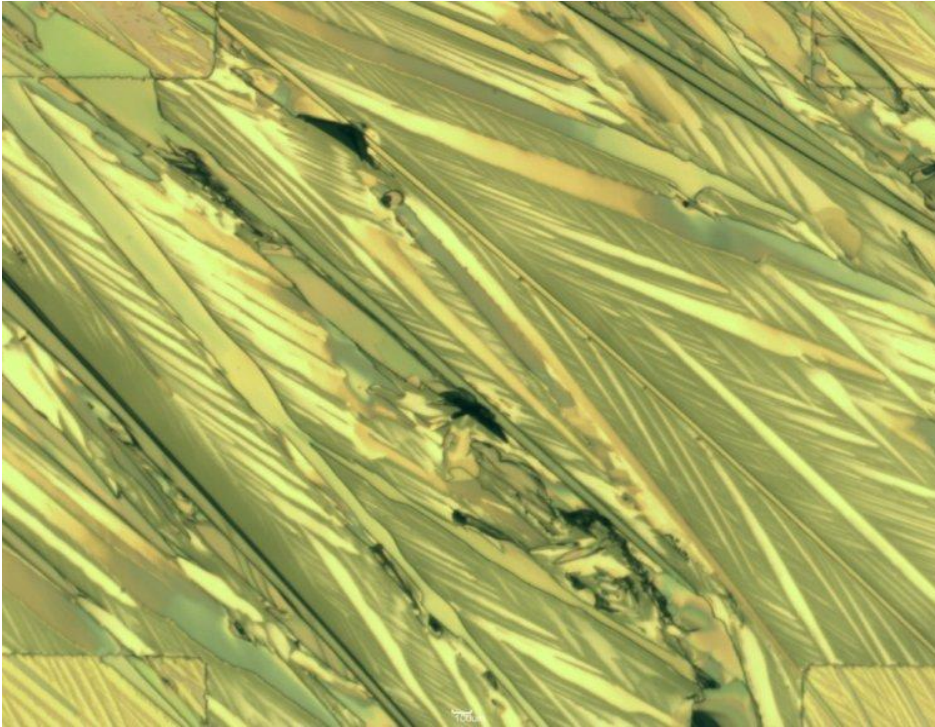
Images below taken of thin films of TIPS-pentacene deposited by spin casting and drop casting from toluene (10 mg/ml) on SiO<sub>2</sub> showing the strong crystallisation behaviour especially in slow dried films.



Spin coated 1000 RPM



Spin coated 300 RPM



Drop cast (covered)

To the best of our knowledge the technical information provided here is accurate. However, Ossila assume no liability for the accuracy of this information. The values provided here are typical at the time of manufacture and may vary over time and from batch to batch.