

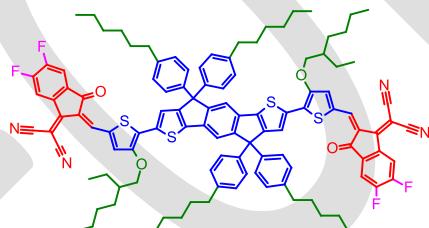
## CERTIFICATE OF ANALYSIS

1M Material: IEICO-4F / NFA015

CAS No: 2089044-02-8

Chemical Name: 2,2'-(*Z,Z*)-(((4,4,9,9-tetrakis(4-hexylphenyl)-4,9-dihydro-sindaceno[1,2-b:5,6-b']dithiophene-2,7-diyl)bis(4-((2-ethylhexyl)oxy)thiophene-5,2-diyl))bis(methanlylidene))bis(5,6-difluoro-3-oxo-2,3-dihydro-1H-indene-2,1-diylidene))dimalononitrile

Chemical Structure: See below



Lot No.: DW12088P

Appearance: Shine blue-black solid

NMR: Confirmed

Purity: 99+% (by NMR)

Solubility: Soluble in chloroform, chlorobenzene and other selected solvents