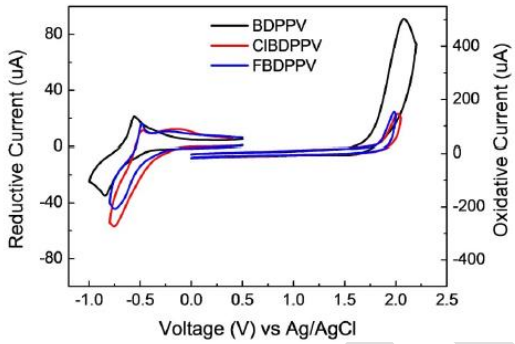
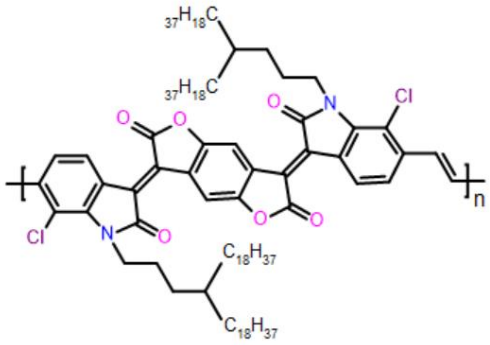
1-Material Inc
2290 Chemin St-Francois
Dorval, Quebec
H9P 1K2, Canada

CERTIFICATE OF ANALYSIS

Common Name:	Cl-BDPPV /OS0076
CAS:	1782088-07-6
Chemical Name:	Poly[[5-chloro-1,2-dihydro-1-(4-octadecyldocosyl)-2-oxo-3*H*-indol-6-yl-3-ylidene]-(1*E*)-1,2-ethenediyl[5-chloro-1,2-dihydro-1-(4-octadecyldocosyl)-2-oxo-3*H*-indol-6-yl-3-ylidene][2,6-dioxobenzo[1,2-*b*:4,5-*b*']difuran-3,7(2*H*,6*H*)-diylidene]]





Lot No:	HW3094CH
Appearance:	Deep blue-black solid
NMR:	Confirmed
Assay:	98+% (NMR)
Solubility:	Soluble in CHCl3, and other selected organic solvents
GPC Analysis:	Mw = 85000, PDI = 2.5 (PS standards)
Reference：	J. Am. Chem. Soc. 2015, 137, 6979−6982

Summary of electrochemical properties of three polymers

	E_{HOMO} (eV)	E_{LUMO} (eV)	E_F (eV)	E_{gap} (eV) (CV)	E_{gap} (eV) (optical)
BDPPV	-6.20	-4.01	-4.36	2.19	1.42
ClBDPPV	-6.29	-4.30	-4.50	2.00	1.39
FBDPPV	-6.27	-4.17	-4.49	2.10	1.46