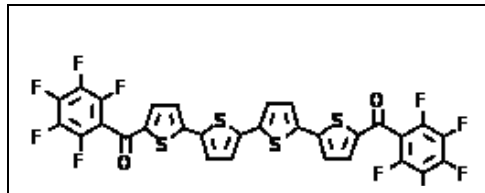


ActivInk™ N0400



Materials Properties

Chemical Structure:	DFCO-4T
Physical Form:	Orange solid
Purity:	> 99.5%
Melting Point:	291-294°C
Solubility:	Chloroform, dichlorobenzene
Crystallization Motif:	Herringbone
Can Publish Results:	Yes



Electronic Properties

Optical Absorption (λ max.):	455 nm
HOMO / LUMO (by CV.):	5.8 / 3.4
Abs. Coefficient:	No Data
Bandgap:	2.4eV

Typical Device Data

Carrier Mobility:

Deposition Method	Mobility	Device Stack
Vapor	0.1 – 0.45 cm^2/Vs	TCBG Si / SiO_2 -HMDS / Au / L=50 μm
Drop-Cast	0.1 – 0.3 cm^2/Vs	TCBG Si / SiO_2 -HMDS / Au / L=50 μm

Turn-on Voltage:	10 – 30 V
On/Off Ratio:	$1.0 \times 10^{5-7}$
Device Shelf Life:	Good
Recommended Contact Type(s):	Au, but will work with others.

FET Transfer Characteristic

Vapor

Drop-Cast

Coming Soon

* Pulse bias stress is measured by holding $V_{sd} = 40\text{V}$, and cycle V_{gs} from -40V to $+40\text{V}$ at 1Hz. Operational lifetime is quoted as the number of cycles at which $I_{on, t} = .70 * I_{on, t=0}$