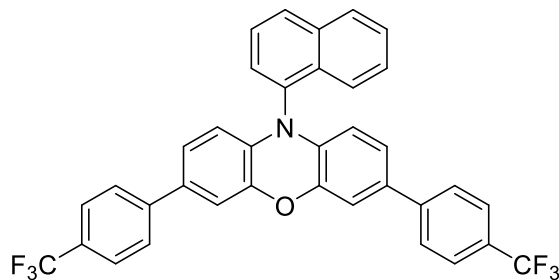


Phenox O-PC™ A0205



Physical properties

Product name	Phenox O-PC™ A0205
Scientific name	10-(naphthalen-1-yl)-3,7-bis(4-(trifluoromethyl)phenyl)-10H-phenoxazine
MilliporeSigma catalog #	N/A
CAS number	N/A
Formula	C ₃₆ H ₂₁ F ₆ NO
Molecular weight	597.56
Appearance	Yellow powder or crystals
Purity	≥ 97%
Maximum solubilities at 25°C	Water: TBD DMSO: TBD MeOH: TBD DMF: TBD MeCN: TBD DCM: TBD Toluene: TBD

Photo/electrochemical properties

Character	Strong reductant/ energy transfer sensitizer
E°(² PC ^{•+} / ¹ PC [*])	-1.87 V vs. SCE
E _{1/2} (² PC ^{•+} / ¹ PC)	0.75 V vs. SCE (reversible CV)
λ _{max,em}	473 nm (2.62 eV)
λ _{max,abs}	389 nm
ε _{max,abs}	19100 M ⁻¹ cm ⁻¹
Application notes	<ul style="list-style-type: none"> • C-N, C-O, C-S, and C-C cross-couplings. • Reduction of alkyl halides for vinyl or aromatic addition/ substitution (e.g. trifluoromethylation) • Atom transfer radical polymerization

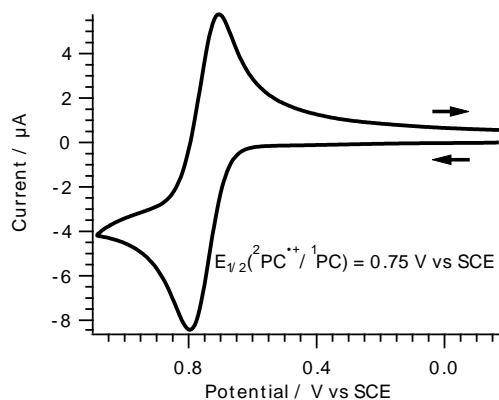


Figure 1: Cyclic voltammetry for 1e⁻ oxidation of ground state ¹PC in DMF with 0.1 M TBAPF₆ at 100 mV/s.

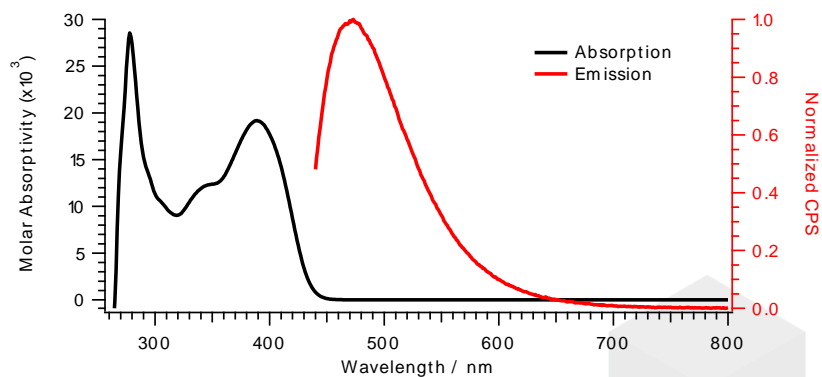


Figure 2: UV-vis absorption and emission spectrum in DMF.