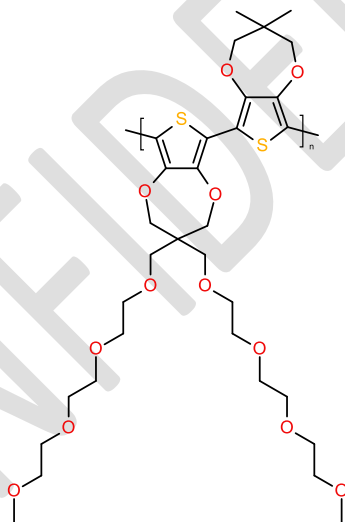


Technical Data Sheet

1M Material:	Custom Made Electrochromic Polymer: ProDot
Common Name:	ProDot, ProDOT(OE)-DMP
Potential Applications:	Electrochromic, Energy Storage, OECT
Chemical Structure:	



Appearance:	Bluish black solid
Molecular Weight:	~20K, (Mw), PDI~2.0 (GPC PS standards)
Purity:	99+% (basing on NMRs of monomers)
Solubility:	Soluble in selected organic solvents

1-Material is dedicated to provide the material according to customer's needs, and some material we promoted may be solely offered to certain customers for their specific needs in their research and development projects on a custom synthesis basis or on a contract research basis. All the material is offered as it is, along with the information and technical advice-where verbal, in writing or by way of trials-are given in good faith and are believed to be accurate but without warranty since the conditions of use are beyond the control of 1-Material, and this also applies where proprietary rights of third parties are involved. For the condition and term of our offer and service, please consult the disclaimer in our web: www.1-material.com

Highlights

High redox activity in both aqueous and non-aqueous electrolytes, oxidation onsets lower than 0 V vs. Ag/AgCl, high contrast ($\Delta T > 70\%$), fast switching (1 s) in NaCl_{aq}, and charge-storage capacity over 80 F/g when used as an active material in organic electrochemical transistors.

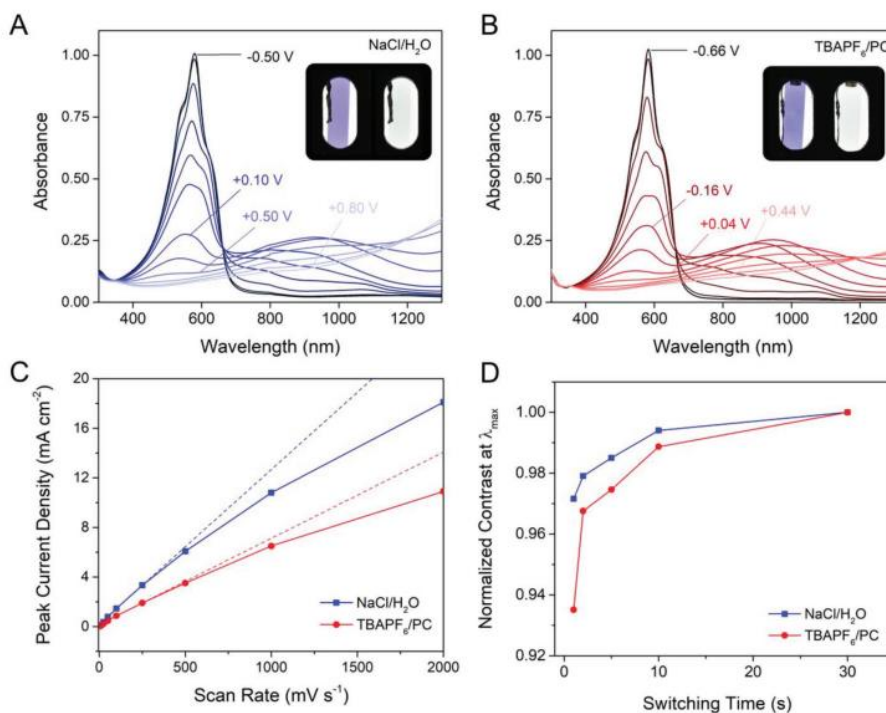


Figure 2. A,B) Potential-dependent spectra of ProDOT(OE)-DMP films on ITO glass recorded every 0.1 V in: A) 0.5 M NaCl/H₂O from -0.5 to +0.8 V vs Ag/AgCl, and B) in 0.5 M TBAPF₆/PC from -0.66 to +0.44 V vs Fc/Fc⁺. Photographs show films under potentiostatic conditions at the indicated extreme anodic and cathodic potentials in the respective electrolyte. C) Peak current as a function of scan rate for ProDOT(OE)-DMP in both electrolytes. Dashed lines indicate extrapolated linear fit for first four points. D) Change in percent transmittance at 581 nm of different ProDOT(OE)-DMP films on ITO as a function of switching time in 0.5 M NaCl in H₂O (-0.8 to +0.7 V vs Ag/AgCl) 0.5 M TBAPF₆ in PC (-0.9 to +0.6 V vs Fc/Fc⁺).

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