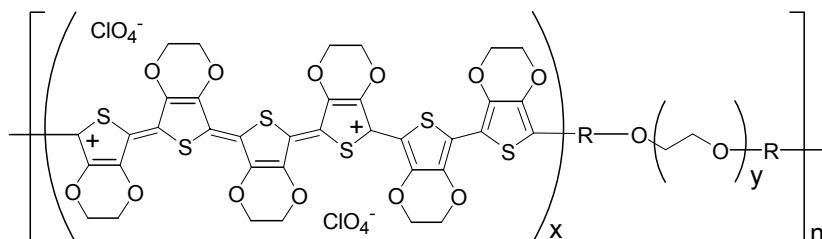


# Fact sheet for **AEdotron™-C** dispersion, 1% in propylene carbonate

Molecular structure



Chemical Identity

Block copolymer of poly(2,3-dihydrothieno(3,4-b)-1,4-dioxin) [also known as PEDOT or poly(3,4-ethylenedioxythiophene)] and polyethylene glycol (PEG) doped with perchlorate

Bulk conductivity

0.1-1.0 S/cm (vol. res. 1-10 Ω·cm)

Typical surface resistance of drop cast films dried at 80°C

10<sup>3</sup>-10<sup>4</sup> Ω/□ @ 70% Transmittance

Composition

90-95 (wt)% propylene carbonate  
4-8 (wt)% acetonitrile  
0.8-1.2 (wt)% Aedotron™-C polymer

Form

Liquid dispersion

Typical Usage

Conducting films, anti-static layers, organic electronics, flexible circuits and TFTs, capacitors, and batteries

Application Guide

Store this product at room temperature (do not refrigerate or freeze). Some settling will normally occur. Agitate, sonicate, and filter prior to use. A plug of glass wool in a pipette can be used for easy filtration. The shelf life of this product will vary depending on how it is stored and handled. Product should be discarded if heavy aggregation occurs, or if sonication / filtering are inadequate to produce a good casting solution. Propylene carbonate can be used to cast films on many substrates, but may require heating (e.g. 80 °C) to dry. Resistance of substrates to propylene carbonate should be tested in each case.

Features and Benefits

The block copolymer structure renders the conducting polymer PEDOT highly dispersible in organic solvents. Propylene carbonate is suitable for dip coating or printing, but does not work well for spin coating. This dispersion does not contain excess acids, added electrolytes, surfactants or other stabilizers.