

BORON MOLECULAR

ELECTROACTIVE POLYMERS

POLYANILINE (PANI)

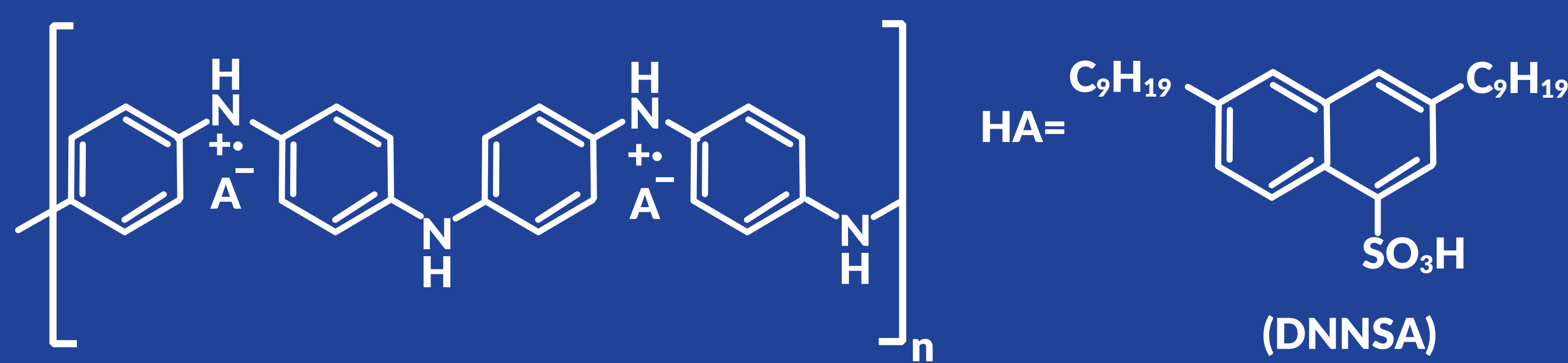
Polyaniline (PANI) is a well-studied electroactive polymer with high intrinsic electrical conductivity. PANI is unique among conducting polymers as its conductivity can be reversibly controlled. Nevertheless, most available PANI has poor-solubility in common solvents limiting its application.

Boron Molecular can now provide toluene soluble solutions of highly defined and high quality doped PANI in commercial quantities.

This material has a broad range of applications in the development of materials that are able to dissipate electrostatic potentials and also in the development of electrically conductive materials, coatings and composites.

Commercial applications of polyaniline include: electrostatic dissipation; anticorrosion coatings; rechargeable batteries; various electronic devices; sensor; organic photovoltaics; and separation membranes.

DNNSA doped Polyaniline Emeraldine Salt (PANI-ES)



SPECIFICATIONS

Dopant	Dinonylnaphthalene sulfonic acid (DNNSA)
Molecular Weight	MP 55,000; Mn 43,000; Mw 66,000
Polydispersity	1.52
Conductivity	1 x 10 ⁻⁵ S/cm or 10 S/cm
Colour/UV-Vis transmission	Dark emerald green
Processability	Soluble: xylene, toluene, NMP, CHCl ₃ , Chloroacetic acid Insoluble: water, acetone, 2-propanol