

DESIGNING ENERGY STORAGE BATTERIES?

DISCOVER THE PERFORMANCE OF SPECIALTY COMPOUNDS



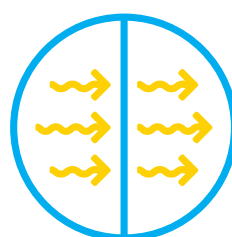
Access SABIC's broad portfolio of specialty compounds and resins well-suited for fuel cell or redox flow batteries. Benefit from SABIC's innovation approach and technical support for battery applications.

HOW CAN SABIC SPECIALTIES HELP YOU WITH YOUR MATERIAL NEEDS?

LNP™ COMPOUNDS FOR CONDUCTIVE ELECTRODE PLATES

LNP Compounds are made by melt blending various resins with reinforcements and additives for property enhancements. With over 75 years of compounding excellence, there are more than one thousand LNP Compounds available today.

SABIC brought its first conductive compounds to market in 1974. Since then, LNP Compounds have been used in a host of applications including conductive, thermal management, EMI/RFI shielding, and circuit solutions. Versus metal, they offer weight savings, design freedom, and do not require secondary coatings.




DEVELOPED
LOW RESISTIVITY
COMPOUNDS 2021
(<2 ohm-cm VR)



ELECTRODE PLATES
COMM. ENERGY
STORAGE



EXTRUDABLE INTO
THIN SHEETS

EM/RFI SHIELDING			CONDUCTIVE			STATIC DISSIPATIVE			ANTI-STATIC			INSULATIVE			
10 ⁰	10 ¹	10 ²	10 ³	10 ⁴	10 ⁵	10 ⁶	10 ⁷	10 ⁸	10 ⁹	10 ¹⁰	10 ¹¹	10 ¹²	10 ¹³	10 ¹⁴	10 ¹⁵
VOLUME RESISTIVITY (OHMS-CM)															
 STAT-KON™ Low Resistivity Compounds (<2 ohm-cm)			STAT-KON™ Conductive Compounds			STAT-KON™ Dissipative Compounds			STAT-LOY™ Compounds			BASE RESINS			

NORYL™ RESINS ARE WELL SUITED FOR BATTERY HOUSINGS

NORYL PPE based compounds offer a variety of options bases on blending PPE with PS, Nylon, PP, and TPE.

A lighter weight option versus metal, NORYL resins offer dimensional stability, chemical resistance, long term durability, and good creep under constant load.



FR
CAPABILITY



GOOD DIELECTRIC
PROPERTIES



HIGH STIFFNESS &
LOW WARPAGE



ULTEM™ RESIN IN H2 PRODUCTION EQUIPMENT AND FUEL CELLS

PEI based compounds find use in applications where chemical resistance and high heat properties are needed in amorphous resins.

ULTEM resin has been successfully used in membrane support frames for hydrogen production equipment and as films used in methanol fuel cells.



INHERENT
FR



GOOD MECHANICAL
PROPERTIES



HIGH STIFFNESS IN
THIN WALL PARTS

Its low leaching and good mechanical properties contribute to long-term operation and reliability of complex assemblies.

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SABIC MATERIAL FINDER
Find the right Specialties material
for your application ►



ELECTRICAL
& ELECTRONICS

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