

Technical Data Sheet



ETERSOL 1730

Required characteristics for effective binders with good capacity retention are, for example, sufficient binding of active material, adhesion to current collector, insolubility into electrolyte solution, high melting point, and chemical/electrochemical stability over a wide potential range.

Composition

ETERSOL 1730 Aqueous dispersion of PAA.

Typical Properties

Solvent	Water
Appearance	Transparent Light Amber Liquid
Viscosity (cps) Brookfield LVT Viscometer	4000~8000
pH (25 °C)	4~8
Non-Violent Content (wt%)	7±1
Shelf Life (month)	4

Incorporation and Processing Instructions

Mixing Process instructions Binder addition suggestion- mixing process (1)
-->Active material: Si+Graphite
-->The coating layer loading < 4 mg/cm² (using Pure ETERSOL1730)

Formulation	Si	Conductive carbon	ETERSOL1730
%	80	8	12

ETERSOL1730 (10~15%)

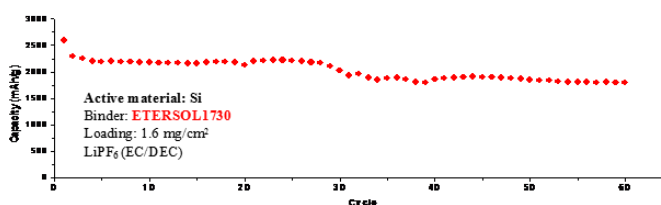


Si (85~75%)

Conductive carbon (5~10%)

Adjust viscosity of Slurry

Adjusting slurry solid content and viscosity value based on customer process parameters. When slurry solid content is low, the coating process recommended to adjust the oven temperature and pay attention to the moisture content of coating layer.



Binder addition suggestion- mixing process (2)

-->Active material: Si+Graphite

-->The coating layer loading > 4 mg/cm², <10 mg/cm²

Formulation	Si	Graphite	Conductive carbon	ETERSOL1730	SBR+CMC
%	9	85	2	0.7	3.3

ETERSOL1730(0.3-1%)

+

Si(5-10%)

CMC(1.2-2%)

Conductive carbon (2-3%)

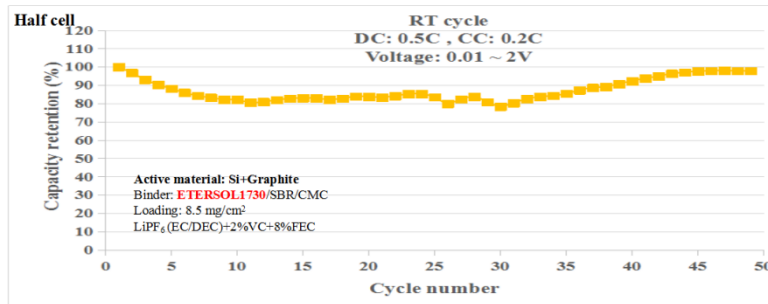
Graphite (90~80%)

SBR(1.5-3%)

Adjust viscosity of slurry

Adjusting slurry solid content and viscosity value based on customer

process parameters. When slurry solid content is low, the coating process recommended to adjust the oven temperature and pay attention to the moisture content of coating layer.



Special Features and Benefits

Electrochemical performance

The addition of this binder may improve the electrochemical performance of the Si-based electrode compared to that of conventional binder.

Storage and Transportation

ETERSOL 1730

The shelf life is 6 month .
