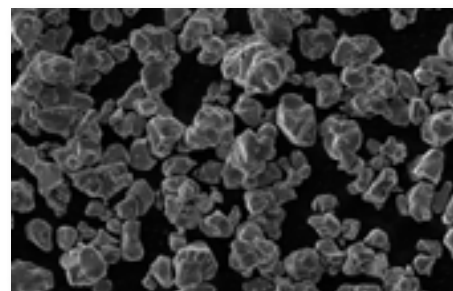


NMC 811 Single Crystal Specifications

SUSTAINABLE BATTERY MATERIAL PRODUCTION - FASTER, CLEANER AND AT A LOWER COST THAN CONVENTIONAL METHODS

6K Energy produces single crystal NMC 811, desired in the industry but challenging and costly to manufacture with conventional methods. Single crystal NMC enables improvements in cycle life and safety. 6K Energy can produce NMC 811 with its UniMelt® technology at a significantly lower environmental impact than conventional methods. Based on a 3rd party LCA by Minviro, the UniMelt process reduces CO2 emissions as much as 65% versus co-precipitation.

Characteristic	Specification
Li:M:	1.00
Ni:M:	0.84
Mn:M:	0.07
Co:M:	0.09
Residual Li Salts (LiOH+Li2CO3, wt%)	≤0.5
BET (m2/g)	0.8 ± 0.2
D50 (um)	4 ± 1
Span	≤1.7
Tap Density (g/cc)	≥1.5
First Charge Capacity (mAh/g)	230 ± 4
First Discharge Capacity (mAh/g)	206 ± 4
Trace Metals: Fe (ppm)	≤50
Trace Metals: Ca (ppm)	≤50
Trace Metals: Cr (ppm)	≤50
Trace Metals: Cu (ppm)	≤50
Trace Metals: Na (ppm)	≤300



6K Energy NMC 811 Single Crystal SEM

