

ANTEO X™

Powerful cross-linker additive for high silicon lithium-ion batteries



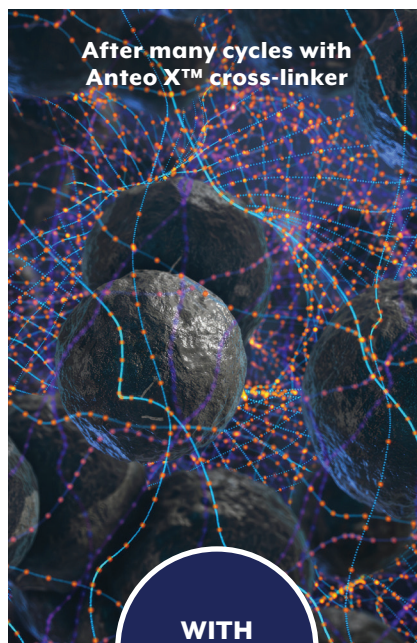
ANTEO X

Anteo X™ is a game changer for silicon anodes. Its unique cross-linking technology improves silicon anode performance by increasing capacity and extending cycle life.

The Anteo X™ technology enhances binder materials by creating cross-linked networks resulting in a uniform 3-D network structure while complementing the performance attributes of carbon nanotubes.

These product synergies create performance improvements and enable cost reductions for the next generation (>10% Si) lithium-ion batteries.

Anteo X™ production facility ready to produce, scale and supply.



WITH
ANTEO X™



WITHOUT
ANTEO X™

ANTEO X™

HIGH PERFORMANCE

- Increased capacity retention up to +5%¹
- Improved cycle life (in excess of 35% achieved)¹
- Improved mechanical integrity and reduced anode expansion by up to 40% achieved²

IMPROVED COST EFFICIENCIES

- Reduction and/ or optimisation of binder content/ inputs by >2wt.%³
- Reduction and/ or optimisation in CNT content by 50%¹
- Low-cost alternative to complex and costly binder synthesis

COMPATIBLE WITH A RANGE OF INPUTS & PROCESSES

- Wide range of binder materials - SBR binders, PAA co-polymers, CMC and Alginate compatible
- Non-hazardous water-based solutions (non PFAS)
- Easy to implement within existing manufacturing processes

Legend:

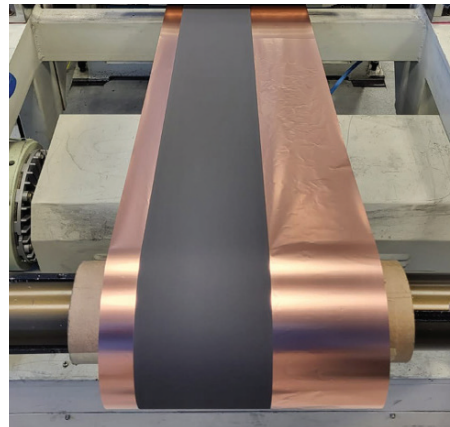
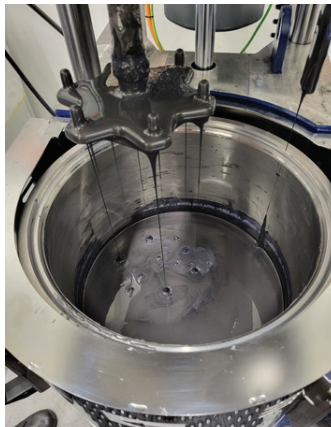
¹ Demonstrated in full coin cells with a 20% Si/C containing anode at 80% of original anode coating capacity

² Demonstrated in AnteoTech's proprietary Ultranode™ design at cycle 100 at cycling capacity of 1,300mAh/g (C/2)

³ Demonstrated by external party in 80% SiOx anode for eVTOL applications

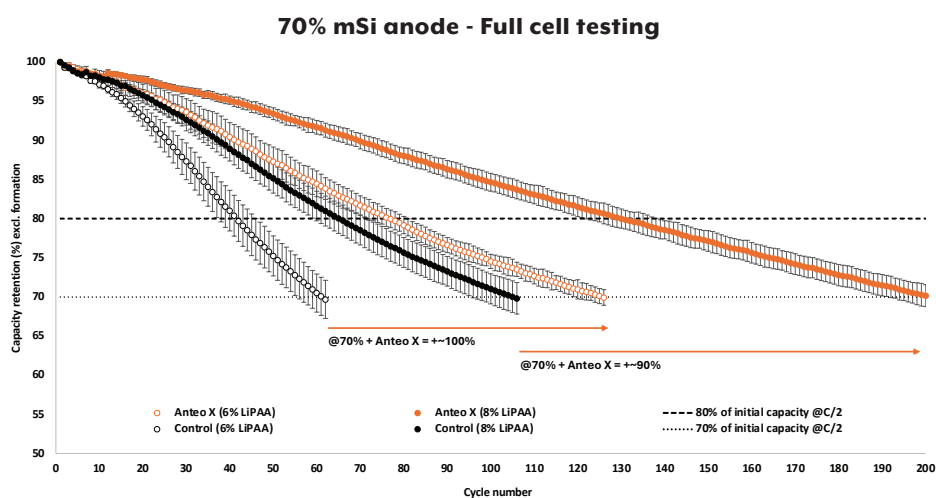
ANTEO X™ EASILY INTEGRATES INTO EXISTING ANODE MANUFACTURING PROCESS

Anteo X™ has been successfully applied in scale-up anode production, confirming its compatibility and scalability.



ANTEO X™ IMPROVES CYCLE LIFE IN HIGH-CAPACITY SILICON ANODES

Independent testing of high silicon content/high-capacity anodes have shown that Anteo X™ is effective in improving cycle life whilst reducing binder content and maximising active materials.

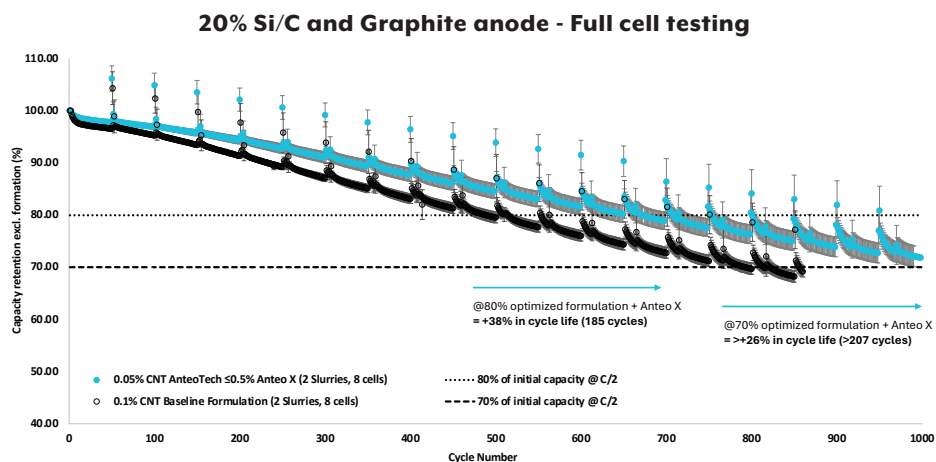


Application example 1 - AnteoTech internal testing

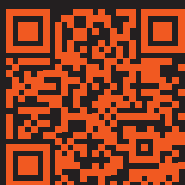
ANTEO X™ SUPPORTS ANODE PERFORMANCE OPTIMISATION

Anteo X™ (<0.5wt.%) paired with an optimised anode formulation achieved:

- 5% higher capacity retention over the control (at cycle 485)
- 38% improvement in cycle life @ 80% of initial capacity
- 50% reduction in SWCNT content



Application example 2 - AnteoTech internal testing



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AnteoTech

LEADING IN HIGH SILICON ANODE TECHNOLOGY

Collaborate with us. At AnteoTech, innovation is in our DNA. That's why we are on a mission to facilitate silicon uptake across the global lithium-ion battery (LiB) market

Partner with AnteoTech to develop the next generation of high-silicon anodes and power the future of high-energy LiB technology