



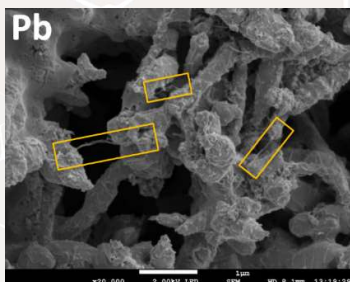
BLACK DIAMOND
STRUCTURES™



Innovative
Nanomaterial
Solution

Pb AC100

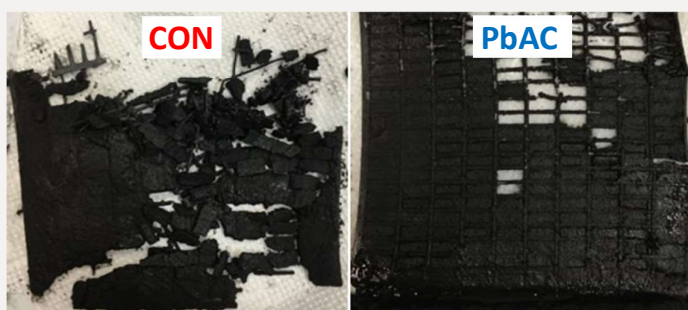
- Automotive
- Motorcycle
- Deep cycle



MOLECULAR REBAR® - based products provide nanoscale, electroactive reinforcements which act to bring the active material together, reinforcing electrode structure, alter interparticle connectivity and morphology to enhance active material structure, overcome structural and chemical limitations that induce failure.

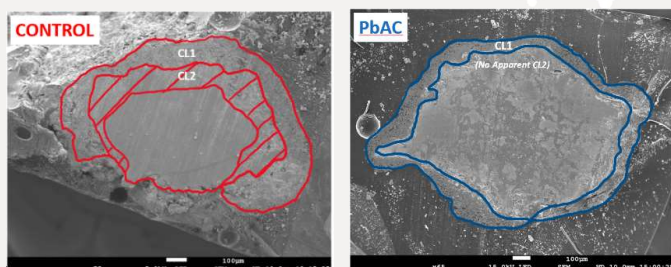
Technical Advantages

PbAC100 generates a superior corrosion layer to improve cycle life. PbAC layer is thinner, denser, more uniform, and as a monolayer instead of a bilayer. This new corrosion layer protects grid from further degradation and improves battery life where corrosion is the failure mode.



Impact of PbAC in Positive plates:

- An effect of altered acid access, improved grid/mass adhesion, likely changed electrochemistry.
- Grow a designed Corrosion Layer
 - Enhance grid-to-mass adhesion.
 - Delay grid corrosion
- Meet challenging OEM specifications.
- Rebalance Advanced Carbon detriments to Corrosion/ Water Loss



PbAC100 can be used in all type of battery positive active material to improve adhesion between grid-to-active material, cohesion between active materials and delay corrosion related failure modes.

