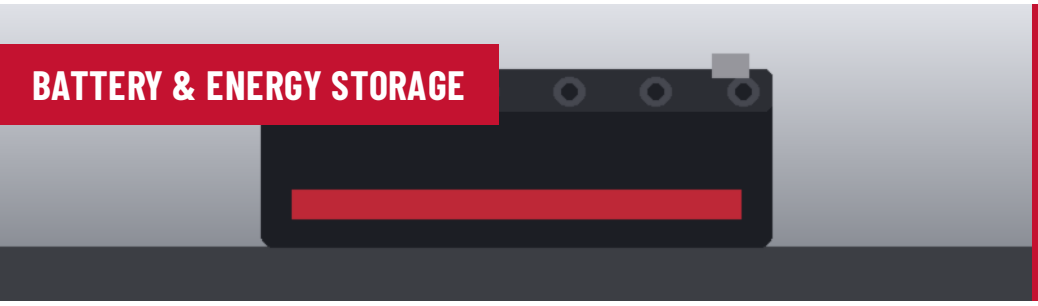
TECHNICAL DATA SHEET



VOLTIX
Series

VOLTIX 255

VOLTIX 255 is a carbon performance additive for advanced lead-acid batteries, designed to balance high dynamic charge acceptance (DCA) with improved cycle life. Added to the negative active material (NAM), it builds a conductive network that raises formation efficiency, reduces residual sulfate and maintains conductivity at end-of-discharge — addressing the sulfation that limits life in partial-state-of-charge operation.

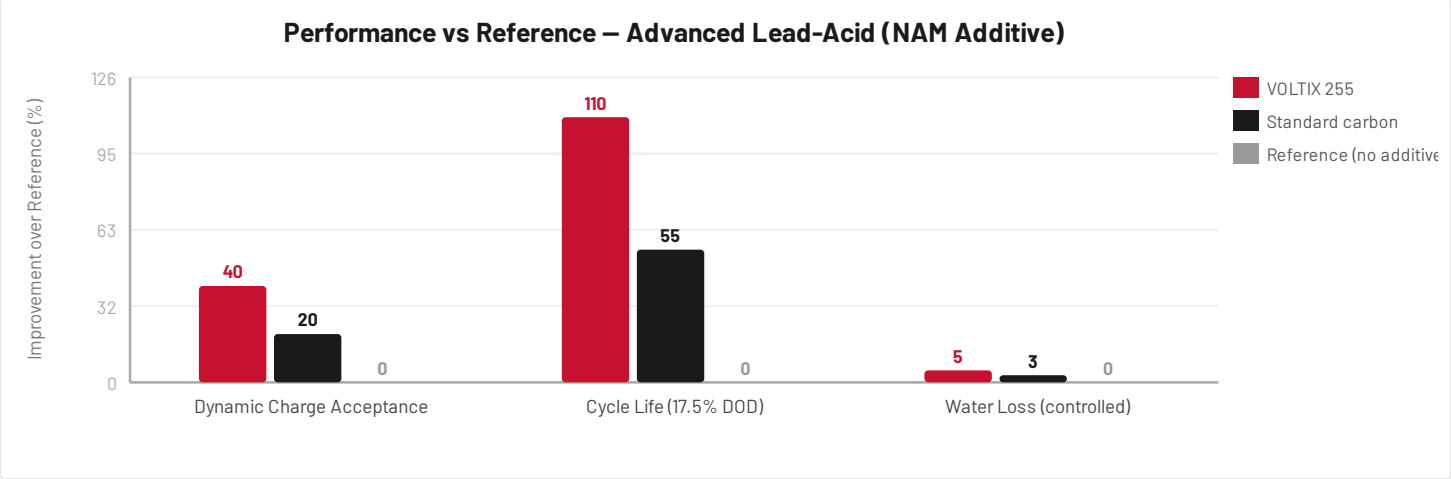
Benchmarked against a no-additive reference (per EN 50342), grades of this class lift dynamic charge acceptance and improve 17.5%-DOD cycle life while keeping water loss controlled. VOLTIX 255 suits valve-regulated and flooded advanced batteries, including start-stop micro-hybrid and industrial cycling duty where fast charge acceptance and durable cycling are required.

KEY APPLICATIONS

- Advanced lead-acid (VRLA & flooded)
- Start-stop micro-hybrid batteries
- Partial-state-of-charge cycling
- Industrial / motive batteries
- Negative active material (NAM) additive

PERFORMANCE FEATURES

- High dynamic charge acceptance (DCA)
- Improved 17.5%-DOD cycle life
- Suppresses negative-plate sulfation
- Conductive network in NAM
- Controlled water loss
- Low iron / high purity



TYPICAL VALUE

Test Items	Unit	Standard
Physical Form	–	**Bead + Powder**
DBP Absorption No.	cc/100g	**210 ± 10**
Iodine Adsorption	mg/g	**650 ± 20**
PH Value		**8.0 ± 1.0**
Tint Strength VS IRB#3	%	**125 ± 5**
Heating Loss	%	**≤ 0.5**
Sieve Residue 325M	ppm	**≤ 50**
Particle Size	nm	**30 ± 2**
Ash	%	**≤ 0.8**

APPLICATION FIELD

Application	Recommended Dosage
Start-Stop & EFB Batteries	0.3 – 0.6%
Advanced Lead-Acid (VRLA)	0.4 – 0.8%
Lead-EV / E-Bike	0.3 – 0.6%
PSoC Cycling	0.4 – 0.8%
Negative Active Mass (NAM)	0.4 – 0.8%
DCA-Cycle Life Balance	0.4 – 0.8%

Recommended dosage can vary with system, electrode/compound design and dispersion conditions.
Physical Form: Bead + Powder | Packaging: 10 kg paper or PE bag

ISTAR MATERIALS

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