



# ELECTRO-RITE® TECHNOLOGIES FOR LITHIUM-ION BATTERIES

Electro-Rite® technologies for Lithium-Ion Batteries (LIBs) are advanced material solutions for inside the battery, designed to improve performance of electrodes and separators.

## Explore our Products

- Electro-Rite® BD020 binder/dispersant for slurries and primers
- Electro-Rite® BD030 binder/dispersant for slurries and primers
- Electro-Rite® BD040 dispersant
- Electro-Rite® AL003 rheology modifier

The Electro-Rite portfolio includes binders, dispersants and rheology modifiers that enhance adhesion, dispersion, viscosity, flow properties and suspension of several particles in slurry formulations such as carbon, graphite, silicon, silicon oxide and ceramic active materials for optimal coating applications. Lubrizol capabilities exist to support formulators to deliver enhanced performance for diverse battery applications.

### SEPARATOR MATERIALS

Changes in battery form factors requires exploring new materials to optimize separator performance. Electro-Rite® technologies bring a new degree of adhesion and flexibility for optimizing battery design.

### ANODE AND CATHODE PRIMERS

Optimizing the adhesion of electrode metallic surfaces to the bulk graphite, carbon, and silicon matrices are critical for performance. Electro-Rite technologies bring a new level of adhesion and flexibility for design requirements.



## Benefits

- Enhanced adhesion, dispersion, viscosity, flow properties and suspension of several particles in slurry formulations

### AQUEOUS SLURRY ADDITIVES

Stable and consistent slurry performance is key to producing and improving electrode and separator performance. Electro-Rite technologies are compatible and electrochemically stable with binder materials to provide improved dispersions of active ingredients. Proven rheology technologies (flow and suspension properties) are available to tailor aqueous slurry profiles to meet coating demands, providing ultimate control over the quality of the electrode or separator coating process.

Contact your local Lubrizol representative for more product details.

## **Lubrizol**

Lubrizol Advanced Materials, Inc. ("Lubrizol") hopes that you have found the information provided helpful, but you are cautioned that this material, including any prototype formulas, is for informational purposes only and you are solely responsible for making your own assessment of appropriate use of the information. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAWS, LUBRIZOL MAKES NO REPRESENTATIONS, GUARANTEES, OR WARRANTIES (WHETHER EXPRESS, IMPLIED, STATUTORY, OR OTHERWISE), INCLUDING ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, OR REGARDING THE COMPLETENESS, ACCURACY, OR TIMELINESS OF ANY INFORMATION. Lubrizol does not guarantee how the materials referenced herein will perform in combination with other substances, in any methods, conditions, or processes, with any equipment, or in non-laboratory environments. BEFORE COMMERCIALIZATION OF ANY PRODUCT CONTAINING THESE MATERIALS, YOU SHOULD THOROUGHLY TEST SUCH PRODUCT, INCLUDING HOW THE PRODUCT IS PACKAGED, TO DETERMINE ITS PERFORMANCE, EFFICACY, AND SAFETY. You are solely responsible for the performance, efficacy, and safety of any products you manufacture. Lubrizol shall not be liable, and you shall assume all risk and responsibility for, any use or handling of any material. Any claims may not be approved in all jurisdictions. Any entity making claims related to these products is responsible for complying with local laws and regulations. Nothing contained herein is to be considered as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner, and it is your sole responsibility to determine if any issues related to patent infringement of any component or combination of components relating to the information provided exists. You acknowledge and agree that you are using the information provided herein at your own risk. If you are dissatisfied with the information provided by Lubrizol, your exclusive remedy shall be to not use the information.