



CENTER FOR RESEARCH IN EXTREME BATTERIES

UV/EB Technology for Li-Ion Battery Manufacturing

A brief introduction

6/23/2023

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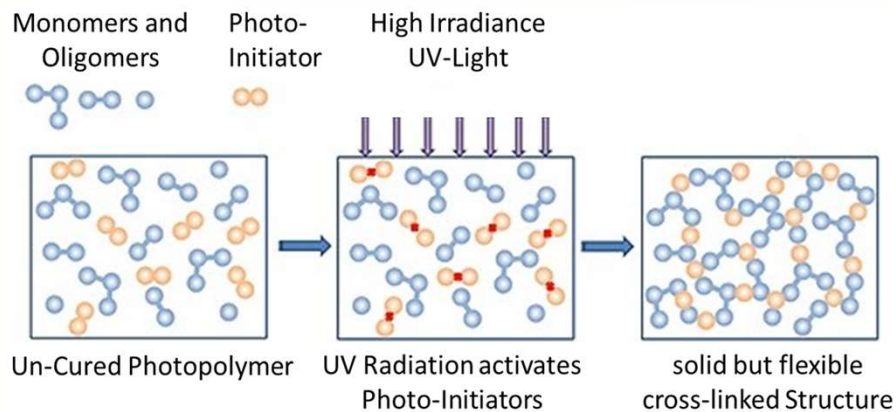
Who is RadTech and why are we buying you coffee?



Industry Association focused on the use and development of Ultraviolet Light and Electron Beam processing technology

BENEFITS

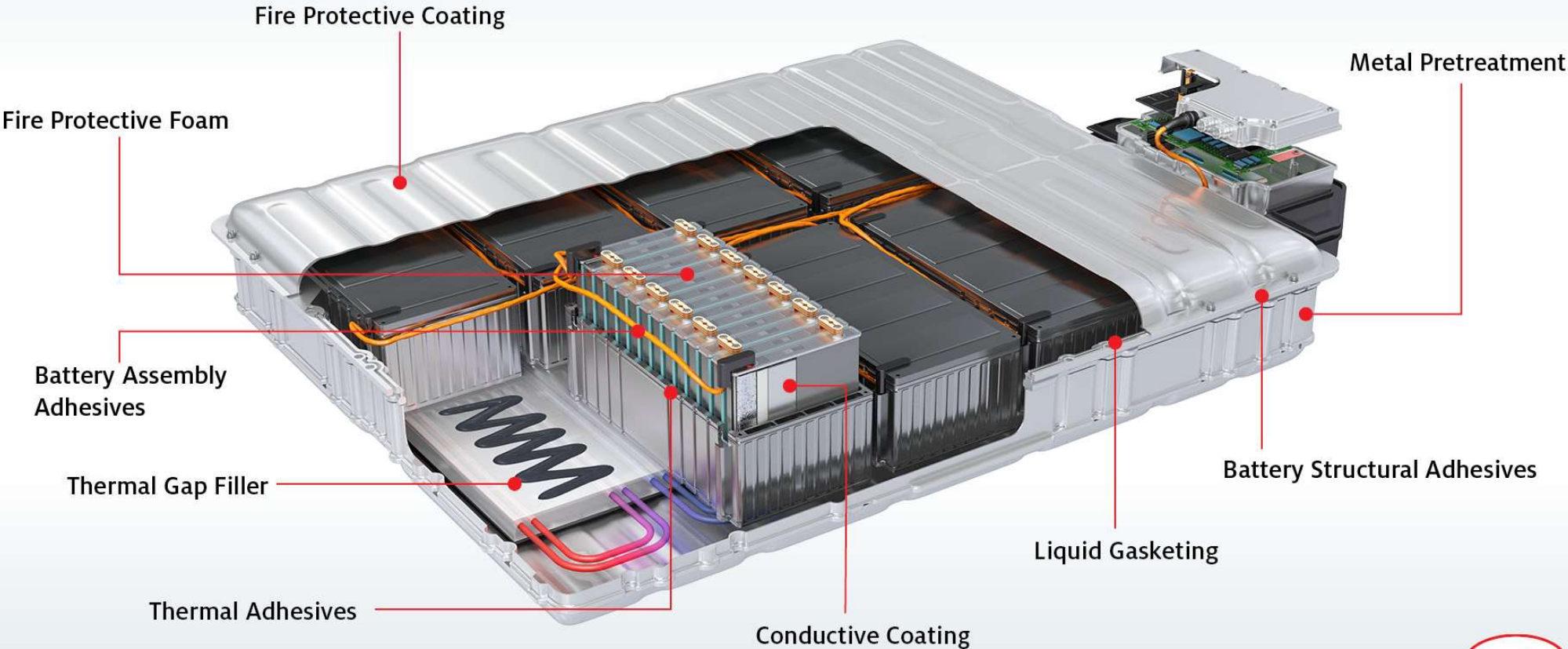
- Eliminate pollution
- Improve productivity
- Increase yield and quality
- Enable new or improved products



APPLICATIONS

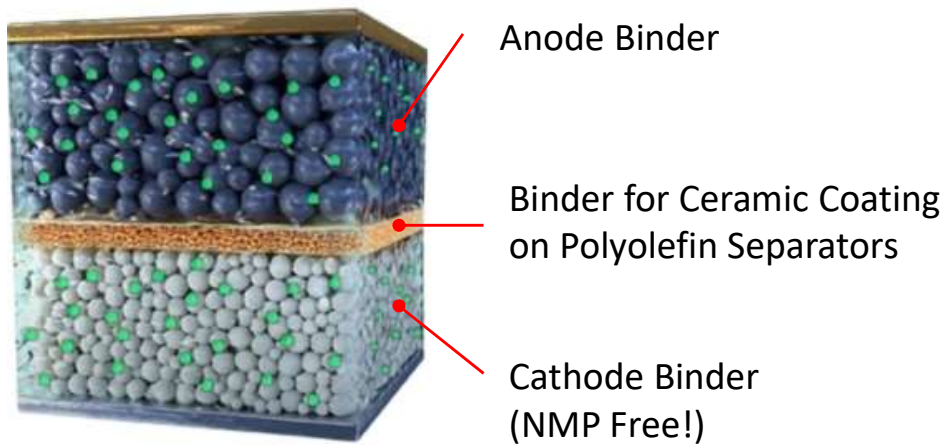
- Wood and vinyl flooring
- Printing and converting
- Adhesives and sealants
- Paints and coatings
- Fiber optics and semiconductors
- Batteries?

Possible use of UV/EB curable materials in Battery Packs

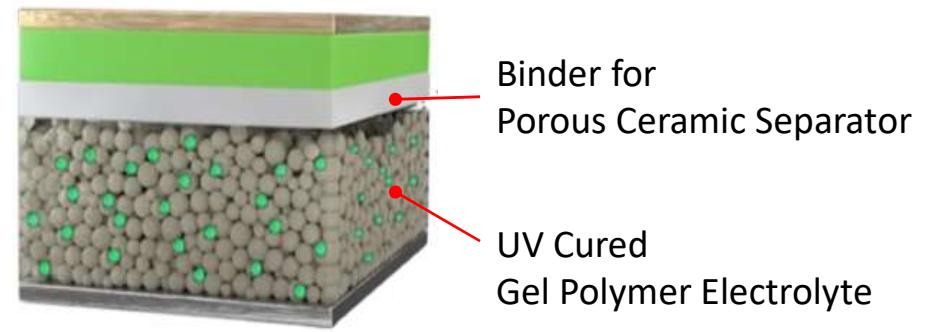


Possible use of UV/EB curable binders in Battery Cells








Conventional Li-Ion Battery



Solid State Battery



Miltec UV technology replaces legacy binders and thermal drying

-  Replace toxic solvents, no NMP
-  Lower energy use
-  Reduce equipment investment
-  Require less floor space
-  Increase manufacturing speed
-  Integrate with existing equipment
-  Maintain or improves cell performance and cycle life
-  Enable novel processes

 Safer for employees and the environment

 Significant manufacturing cost reduction

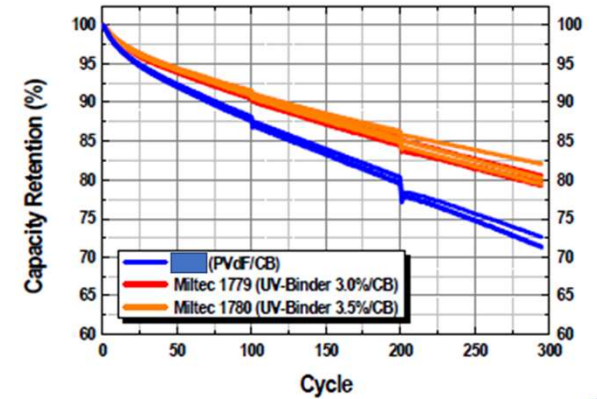
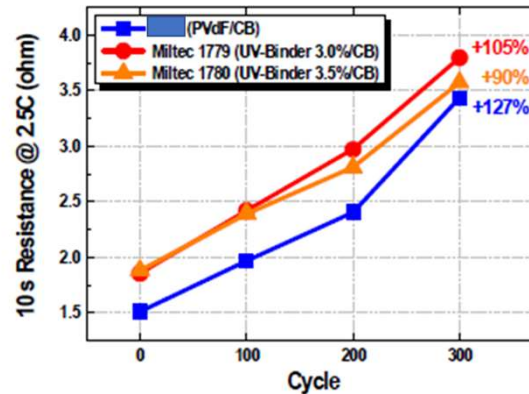
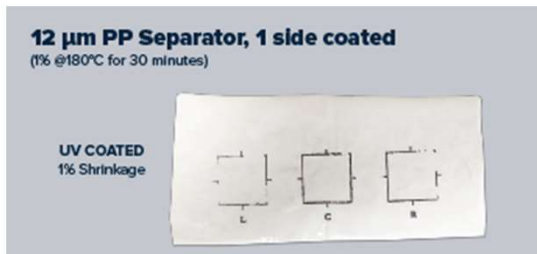
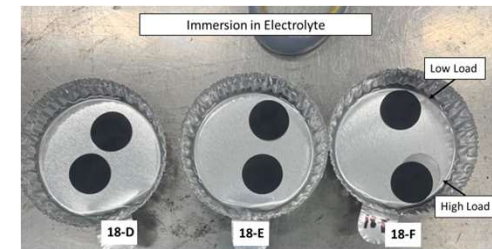
 Improved future batteries

Electrode and Separator Pilot Coating at Miltec

MILTEC UV Pilot Separator Coater



MILTEC UV Pilot Electrode Coater



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Can't wait to learn more?

Looking to explore new processes not limited by thermal drying or solvent use?

Have ideas or needs for novel uses of UV or EB curable materials?

Questions about possible UV/EB applications for your field of study?

Curious about the performance of UV/EB curable Binders relative to PVDF, etc?

Always wanted to visit a battery lab on Kent Island, MD?

Please contact us at:



battery.miltec.com (410) 604-2900



www.radtech.org