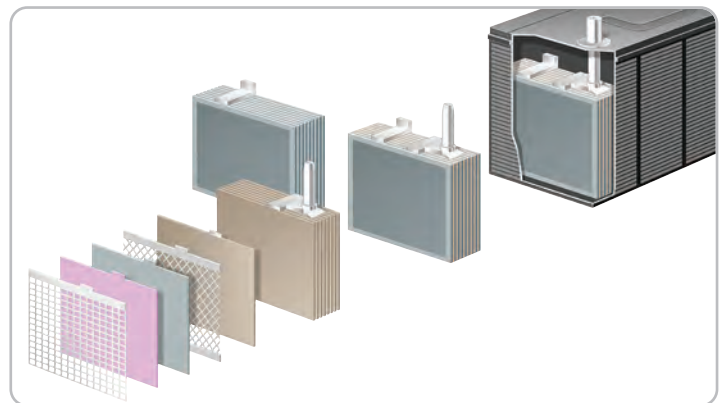
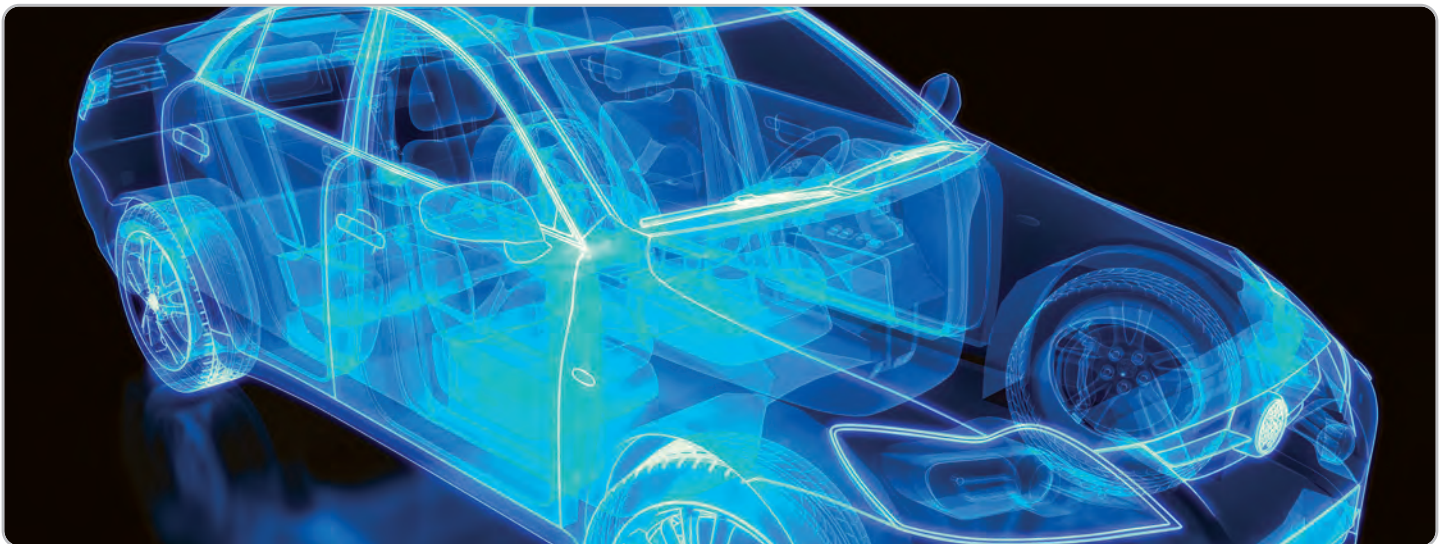




## LifeMat™ non-woven solutions for lead acid batteries



Owens Corning is the leader in glass science responsible for all innovations in glass including E, Advantex® brand and high performance glass over a period of more than 30 years.

Our expertise in chemistry enables leading solutions in every product form from continuous roving to non-woven glass chemistry.

Our state of the art facilities allow us to work in partnership with our customers to develop non-woven solutions for specific applications.

Owens Corning global manufacturing platform ensures delivery of consistent solutions in all regions.



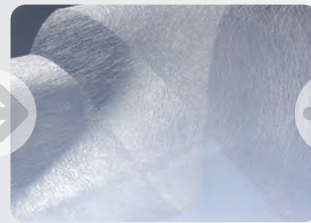
Furnace & glass science



Innovative chemistry



Non-woven solutions

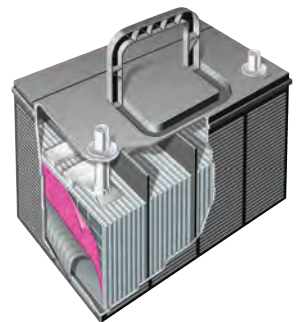


Global platform



### Characteristics of LifeMat™:

- Advantex® ECR (Corrosion Resistant) Glass Technology
- Excellent oxidation resistance at high temperature
- High purity
- Homogenous thickness and porosity
- Low electrical resistance



### Benefits of LifeMat™ in lead acid battery applications:

#### LifeMat™ – Retainer mat

- Prevents positive active mass shedding, extending battery life
- Wets out instantaneously
- Increases vibration resistance
- Protects the separator from oxidation
- Proven performance for more than 25 years

#### LifeMat™ – Pasting mat

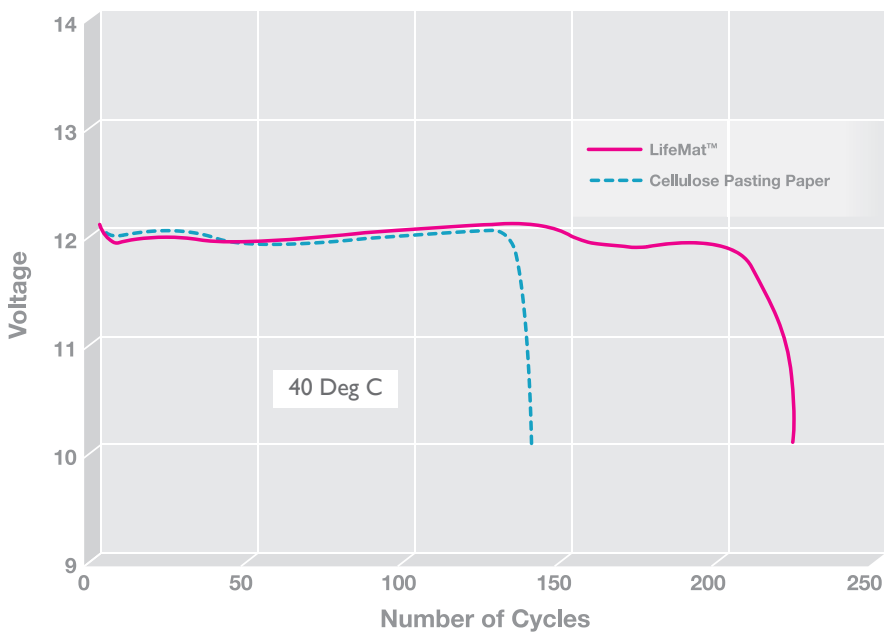
- Prevents positive active mass shedding, extending battery life
- Does not dissolve
- Reinforces the plate
- Maintains compression
- Can be processed on existing continuous pasting lines
- Easy to cut

## LifeMat™ product range:



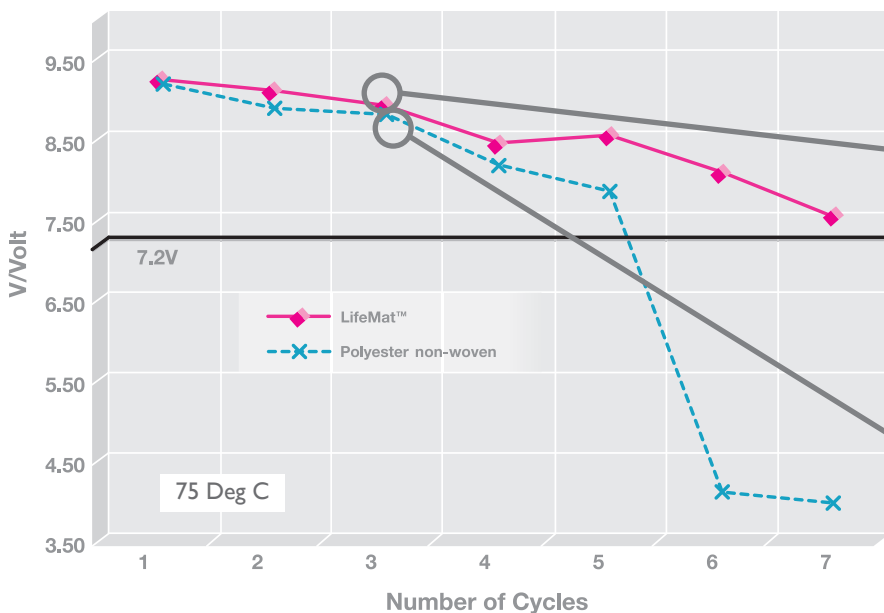
Products	Characteristics
<b>Retainer LifeMat™</b>	Thickness range: 0.20 - 0.91 mm
<b>Pasting LifeMat™</b>	Thickness range: 0.13 - 0.19 mm

### LifeMat™: Cycling at 50% depth of discharge in a VDA endurance test



LifeMat™  
**+40%**  
improvement

### Comparing LifeMat™ vs Polyester non-woven in a J240 overcharge test



LifeMat™  
Superior  
oxidation  
resistance





INNOVATIONS FOR LIVING™

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