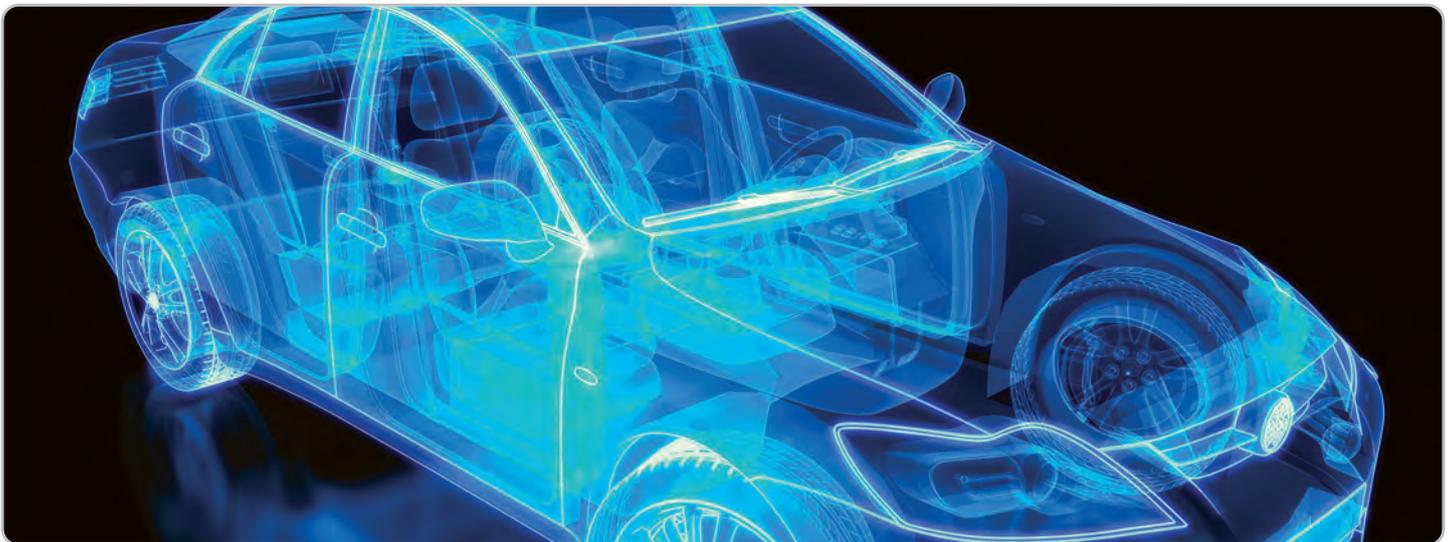




## LifeMat™ non-woven solutions for lead acid batteries



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

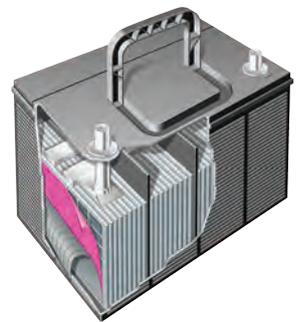


Global platform



### 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

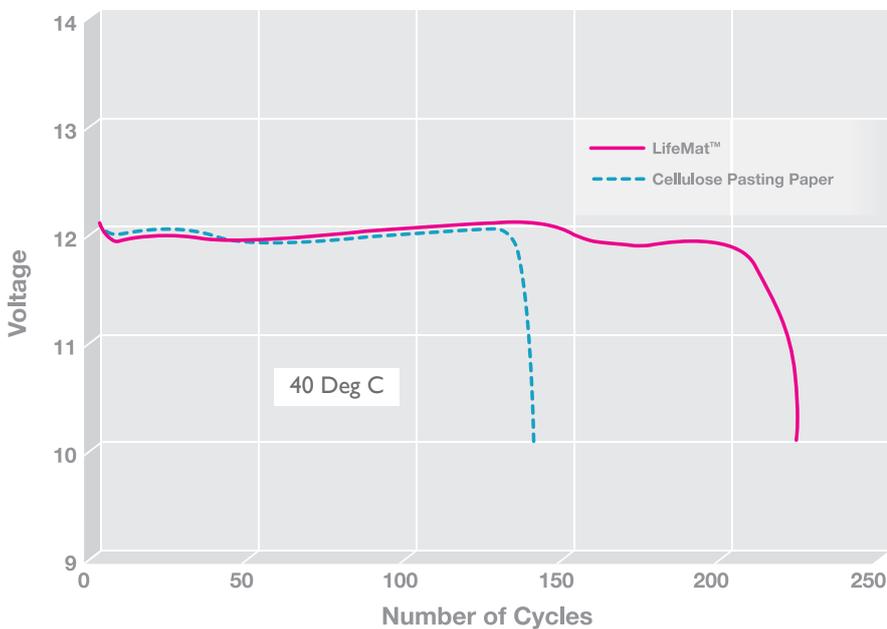
- Prevents positive active mass shedding, extending battery life
- Does not dissolve
- Reinforces the plate
- Maintains compression
- Can be processed on existing continuous pasting lines
- Easy to cut

## LifeMat™ product range:



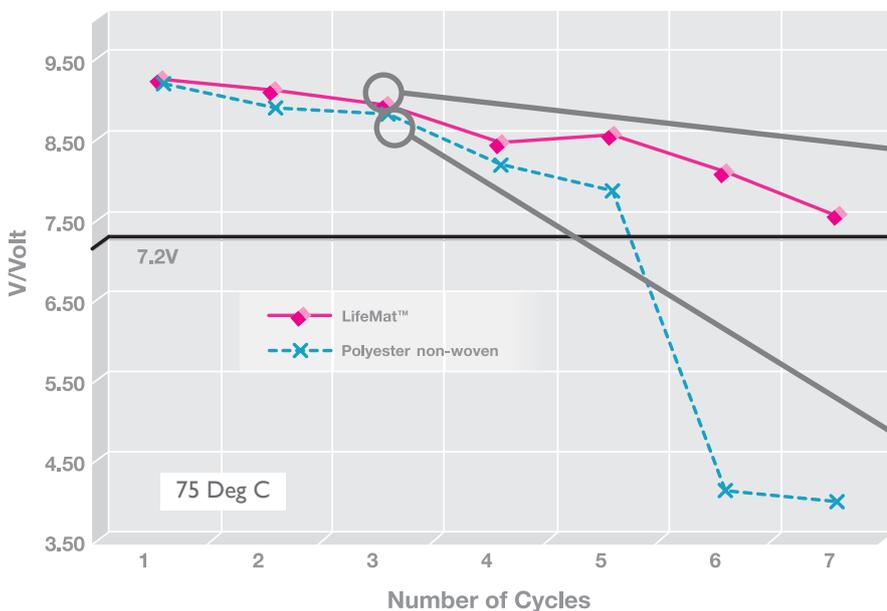
Products	Characteristics
<b>Retainer LifeMat™</b>	Thickness range: 0.20 - 0.91 mm
<b>Pasting LifeMat™</b>	Thickness range: 0.13 - 0.19 mm

## 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™

#### North & Central America

Owens Corning  
Composite Materials, LLC.  
One Owens Corning Parkway  
Toledo  
Ohio 43659  
1.800.get.pink™

#### Brazil

Owens Corning  
Rodovia Washington Luis, Km 171  
Rio Claro - SP - Brazil  
CEP: 13501-600  
+ +55 19 3535-9300 or 0800 707-3312

#### Europe

European Owens Corning Fiberglas Spri.  
166 Chaussée de la Hulpe  
B-1170 Brussels  
Belgium  
+32.2.674.82.11

#### China

Owens Corning - OC Asia Pacific  
Shanghai Regional Headquarters  
Unit 01  
02,05, 39/F,  
Pudong Kerry Parkside,  
1155 Fang Dian Road,  
Pudong,  
201204,  
Shanghai,  
China  
+86-21-6101 9666  
Fax: +86-21-6101 7100

#### India

Owens Corning (India) Pvt. Ltd.  
7th floor, Alpha Building,  
Hiranandani Gardens,  
Powai,  
Mumbai - 400076.  
+91 22 6668 1700

This information and data contained herein is offered solely as a guide in the selection of reinforcement. The information contained in this publication is based on actual laboratory data and field test experience. We believe this information to be reliable, but do not guarantee its applicability to the user's process or assume any responsibility or liability arising out of its use or performance. The user agrees to be responsible for thoroughly testing any application to determine its suitability before committing to production. It is important for the user to determine the properties of its own commercial compounds when using this or any other reinforcement. Because of numerous factors affecting results, we make no warranty of any kind, express or implied, including those of merchantability and fitness for a particular purpose. Statements in this publication shall not be construed as representations or warranties or as inducements to infringe any patent or violate any law safety code or insurance regulation.

Owens Corning reserves the right to modify this document without prior notice.  
© 2013 Owens Corning. All Rights Reserved.

Pub number: 10018213  
Non-woven solutions for lead acid battery  
\_01\_2013\_REV0

January 2013

[www.owenscorning.com](http://www.owenscorning.com)