



MICROPOROUS™

Proven. Partner. Focus.



Flex-Sil®

The Ultimate Antidote for Antimony Poisoning

Flex-Sil® is the preferred separator in the electric golf car market, renewable energy and other deep-cycle applications.

Description:

Flex-Sil® is formulated from natural rubber, amorphous silica and other minor ingredients. Preferred by OE applications, Flex-Sil® offers excellent antimony suppression for increased life of flooded lead acid batteries.

Advantages:

- Excellent antimony suppression for:
 - Improved battery cycling
 - Heavy-duty, deep-cycle applications
 - Lower end-of-charge current, less gassing, less water loss
 - Reduced and easier battery maintenance
- Efficient charge and discharge cycles
- Flexible
- No extractable oils
- Ultrafine pore structure



Features:

- Several profiles (major rib designs) available
- Available with or without glass mat

Flex-Sil® Separator Properties

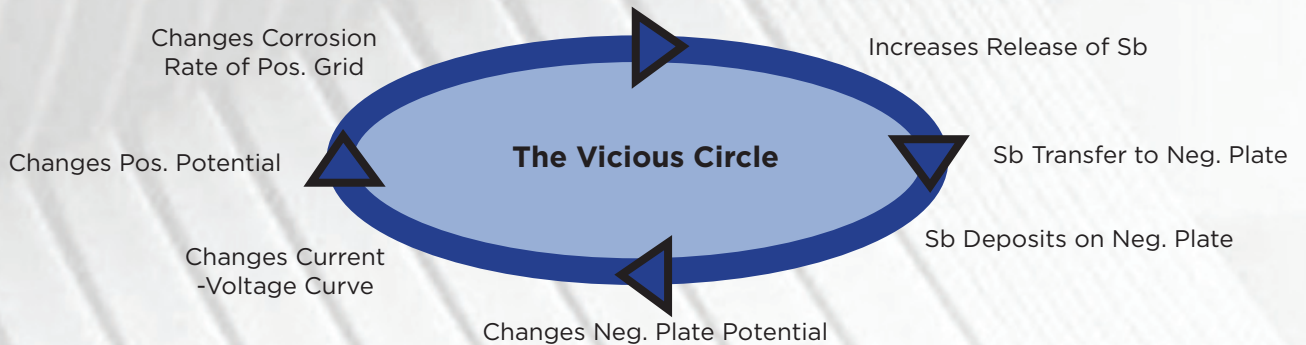
Backweb Thickness (µm)	380
Electrical Resistance (mΩ·cm ²)	300
Volume Porosity (%)	40
Total Oil Content (%)	0

Flex-Sil®

The antimony connection:

Antimonial lead alloys continue to play a key role in the overall success of the lead acid battery in deep-cycle applications. In markets such as motive power and golf car, these alloys have long been known to assist the performance of the positive plate by promoting a healthy, grid-active material interface. Antimony, on the other hand, is a well-established poison to the negative plate and ultimately leads to gassing, water-loss and cell failure. The “Vicious Circle” depicted below points out the good versus bad side of this need:

Antimony Needed in Positive Plate Grid Alloy for Improved Deep-Cycle Performance



Our Flex-Sil® separator, introduced in 1978, quickly became the battery separator of choice for many deep-cycle applications where the battery needed to overcome this issue, and is still the best option for you to increase battery performance as well as lower maintenance costs.

Key Applications:

- Golf car
- Aerial work platforms
- Renewable energy
- Backup power
- Floor machine
- Solar power
- RV
- Marine



Microporous is a leading, dedicated and highly specialized manufacturer of battery separators for flooded lead acid batteries.