



 Albemarle®

SAYTEX ALERO™

Modern fire safety, *advanced sustainability*



 Albemarle®
ALL THE ELEMENTS FOR A BETTER WORLD

IN THE HOME AND ELECTRIC VEHICLES (EVs)

SAYTEX ALERO

Next generation sustainable, recyclable and allows PTFE-free formulation

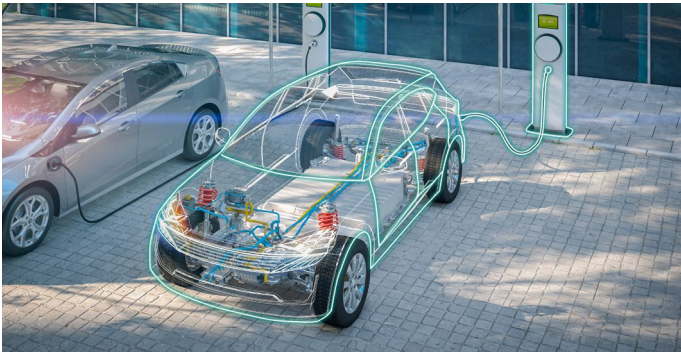
WHAT IS SAYTEX ALERO?

Albemarle's first sustainable, versatile, polymeric flame retardant with next generation recyclability and safety profiles. **SAYTEX ALERO™** enables a wide array of processing conditions and customizable material properties, and allows manufacturers to meet the fire safety demands of an increasingly electrified and digital world.



ELECTRICAL & ELECTRONICS

SAYTEX ALERO flame retardant can be used in the enclosures of various electric and electronic systems, enhancing safety in everyday life.



AUTOMOTIVE

SAYTEX ALERO flame retardant enables auto manufacturers to safely use polymers in the battery casings and other electrical components of cars. It is an important ingredient for supporting the lightweighting of electric vehicles.



BUILDING & CONSTRUCTION

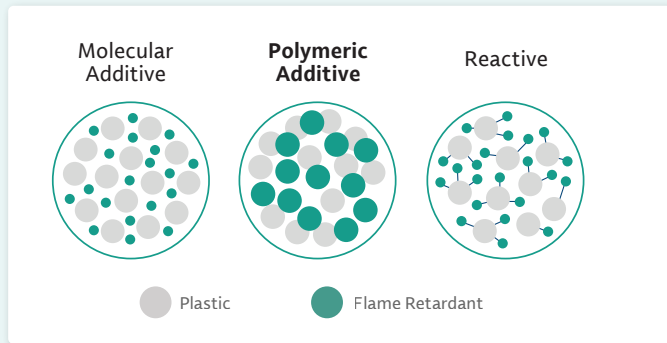
SAYTEX ALERO is ideal to improve the safety measures of various systems for homes, offices and other types of buildings in the electrical junction box and the HVAC network, just to name a few.



POLYMERIC FLAME RETARDANTS

SAYTEX ALERO

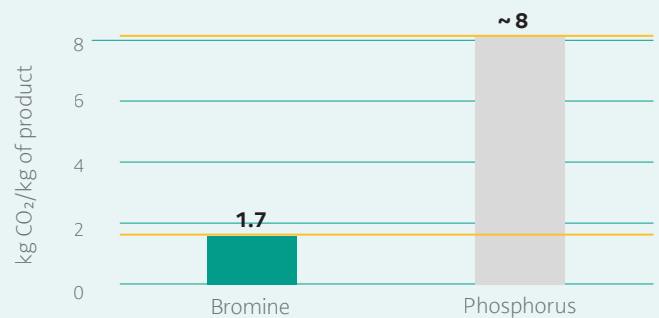
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HOW DO POLYMERIC FLAME RETARDANTS WORK?

The illustration to the left shows the differences among polymer compounds modified with molecular, polymeric, and reactive flame retardants (FRs). Generally, **polymeric FRs** like SAYTEX ALERO offer higher stability than molecular additives and greater formulation versatility than reactive FRs because the large polymeric structure makes it difficult for FR molecules to migrate within the polymer matrix. The non-reactive formulation avoids the constraints of chemical bonding.

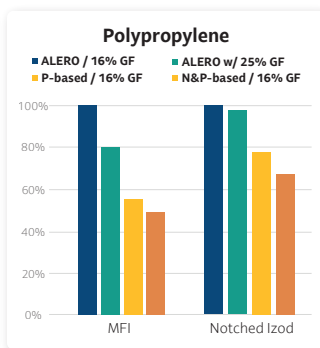
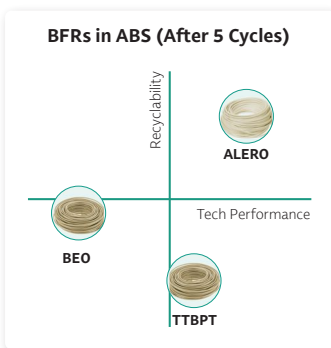
Equivalent CO₂ emission of Bromine vs. Phosphorus



SUSTAINABLE SOLUTION

SAYTEX ALERO Enables Products with Lower Carbon Footprint

This illustration on the left shows that extraction of elemental Bromine is much less energy-intensive than that of elemental Phosphorus, leading to Bromine-based flame retardants with lower greenhouse gas emissions, including SAYTEX ALERO and other products in the SAYTEX portfolio.



An example of relative technical performances of FR modified PC/ABS in comparison with the neat polymer



HIGH PERFORMANCE FOR ABS AND POLYPROPYLENE

ABS | 10% lower loading than TTBPT; 30% lower loading than BEO, better performance, better appearance and excellent EHS profile.

Polypropylene | Melt blendable properties enhance product uniformity and formulation flexibility.

HIGH PERFORMANCE FOR PC/ABS

Superior impact strength with no synergist needed.



EFFECTIVE, TRUSTED FLAME RETARDANTS BACKED BY SCIENCE

Your Product's Fire Safety *Begins with Albemarle*

In addition to our commitments to high-quality and sustainable supply, our industry knowledge and technical expertise position us as a valuable partner for our customers. Albemarle works closely with our customers to ensure that fire safety standards are met today while maintaining engagement in regulations worldwide to guide smart decisions for future development.

END-TO-END EXPERTISE TO MEET OUR CUSTOMERS NEEDS

Albemarle is a partner of choice because of its decades-long reputation for end-to-end technical, product and industry expertise, as well as its broad understanding of the global flame-retardant regulatory landscape.

GLOBAL ENGAGEMENT FOR ADVOCACY OF BROMINATED-FLAME RETARDANTS

Our skilled team is actively engaging with global policymakers and regulatory influencers worldwide. Our goal is to drive value chain collaborations and create and engage in global affiliations who advocate for Bromine products.

Learn more about **SAYTEX ALERO** at www.albemarle.com/fire-safety-solutions

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