

# LIGHTWEIGHT + COMPLIANT

## NEW LIGHTWEIGHT LEXAN™ LIGHT F6L300 SHEET BOOSTS FUEL EFFICIENCY

SABIC's new high-performance patent pending LEXAN LIGHT F6L300 sheet is the lightest thermoplastic sheet option available today, regardless of base material that complies with flame, smoke and OEM toxicity. With a specific gravity of 0.85 g/cm<sup>3</sup>, it offers **up to 40% weight savings** when replacing traditional polyvinyl chloride and acrylic blend (PVC/PMMA) -based sheet products for potential applications such as seating parts, cockpit dashboard enclosures, partitions, luggage compartments and passenger service units. LEXAN LIGHT sheets meet typical industry flame, smoke density and toxicity requirements.

On average, an aircraft will burn about **0.03 kg (0.06 lb) of fuel per hour for each kilogram (2.2 lb)** carried on board. Given that the total commercial fleet flies approximately 57 million hours per year, cutting just one kilogram per flight would save roughly 1,700 tons of fuel and 5,400 tons of carbon dioxide (CO<sub>2</sub>) per year<sup>1</sup>. **Using LEXAN LIGHT sheet** to replace high-toxicity PVC/PMMA products on seating frames can help **reduce weight by approximately 121.6kg (268 lb)** based on an aircraft with average of 190 seats, which can help the total commercial fleet **save roughly 206,720 tons of fuel and 656,640 tons of carbon dioxide (CO<sub>2</sub>)** per year. This potential savings is due to LEXAN LIGHT sheet's innovative closed cell structure, which can be thermoformed into complex 3D shape parts with very thin walls, down to 0.6 mm, offering substantial potential for overall weight savings and fuel efficiency across an airline fleet.

### POTENTIAL BENEFITS:

- > Offers up to **40% weight savings** when replacing traditional PVC/PMMA blend based sheet products
- > Complies with typical industry flame, smoke (**FAR25.853**) and Airbus/Boeing toxicity requirements (**BSS7239, ABD0031**)
- > Innovative **lightweight closed cell foam encapsulated by solid outer layers**
- > Can be thermoformed into **complex 3D shape parts with very thin walls**, offering substantial potential for overall weight savings and fuel efficiency across an airline fleet
- > **Samples available** in standard gray and black colors
- > **Technical support** from SABIC available for sampling and thermoforming



## POTENTIAL APPLICATIONS

- > Seatbacks
- > Kick panels
- > Side panels
- > Seat trims
- > Magazine holders
- > Cockpit dashboard enclosures and components
- > Partitions
- > Luggage compartments
- > Passenger service units

### SEAT TRIM



SEAT TRIM & MAGAZINE HOLDER ARE THERMOFORMED OUT OF LEXAN™ LIGHT F6L306 SHEET BY ZODIAC ENGINEERING PLASTICS IN ONTARIO, CA, USA

### MAGAZINE HOLDER



### AIRCRAFT SIDEWALL



THERMOFORMED OUT OF LEXAN LIGHT F6L306 SHEET BY HAGANS PLASTICS IN GRAND PRAIRIE, TX, USA

## CONTACT US:

### Middle East and Africa

SABIC Global Headquarters  
PO Box 5101  
Riyadh 11422  
Saudi Arabia  
T +966 (0) 1 225 8000  
F +966 (0) 1 225 9000  
E [info@sabic.com](mailto:info@sabic.com)

### Americas

Specialty Film & Sheet  
One Plastics Avenue  
Pittsfield, MA 01201  
USA  
Toll-free  
1 800 323 3783 ext.3  
T 1 413 448 7125  
F (888) 443 2033  
E [sfscustomerservice@sabic-ip.com](mailto:sfscustomerservice@sabic-ip.com)

### Europe

Specialty Film & Sheet  
Plasticslaan 1  
4612 PX  
Bergen op Zoom  
The Netherlands  
T +31 (0)164 293678  
F +31 (0)164 293272  
E [sfs.info@sabic-ip.com](mailto:sfs.info@sabic-ip.com)

### Asia Pacific

Specialty Film & Sheet  
2550 Xiupu Road  
Pudong  
201319 Shanghai  
China  
T +86 21 3222 4500  
F +86 21 6289 8998  
E [sfs.info@sabic-ip.com](mailto:sfs.info@sabic-ip.com)

### Email

[sfs.info@sabic-ip.com](mailto:sfs.info@sabic-ip.com)



THE MATERIALS, PRODUCTS AND SERVICES OF SABIC INNOVATIVE PLASTICS HOLDING BV, ITS SUBSIDIARIES AND AFFILIATES ("SELLER"), ARE SOLD SUBJECT TO SELLER'S STANDARD CONDITIONS OF SALE, WHICH CAN BE FOUND AT <http://www.sabic-ip.com> AND ARE AVAILABLE UPON REQUEST. ALTHOUGH ANY INFORMATION OR RECOMMENDATION CONTAINED HEREIN IS GIVEN IN GOOD FAITH, SELLER MAKES NO WARRANTY OR GUARANTEE, EXPRESS OR IMPLIED, (i) THAT THE RESULTS DESCRIBED HEREIN WILL BE OBTAINED UNDER END-USE CONDITIONS, OR (ii) AS TO THE EFFECTIVENESS OR SAFETY OF ANY DESIGN INCORPORATING SELLER'S PRODUCTS, SERVICES OR RECOMMENDATIONS. EXCEPT AS PROVIDED IN SELLER'S STANDARD CONDITIONS OF SALE, SELLER SHALL NOT BE RESPONSIBLE FOR ANY LOSS RESULTING FROM ANY USE OF ITS PRODUCTS OR SERVICES DESCRIBED HEREIN. Each user is responsible for making its own determination as to the suitability of Seller's products, services or recommendations for the user's particular use through appropriate end-use testing and analysis. Nothing in any document or oral statement shall be deemed to alter or waive any provision of Seller's Standard Conditions of Sale or this Disclaimer, unless it is specifically agreed to in a writing signed by Seller. No statement by Seller concerning a possible use of any product, service or design is intended, or should be construed, to grant any license under any patent or other intellectual property right of Seller or as a recommendation for the use of such product, service or design in a manner that infringes any patent or other intellectual property right.

1 ENVIRO.AERO HAS BEEN ESTABLISHED BY THE COMMERCIAL AVIATION INDUSTRY BODY, THE AIR TRANSPORT ACTION GROUP (ATAG). SABIC and brands marked with ™ are trademarks of SABIC or affiliates.  
© Copyright 2014. All rights reserved.

[www.sabic.com/sfs](http://www.sabic.com/sfs)