

CHEMISTRY THAT MATTERS™



# ANOTHER STEP TOWARDS CIRCULAR ECONOMY

POST-CONSUMER RECYCLED LEXAN™ FILM SOLUTIONS

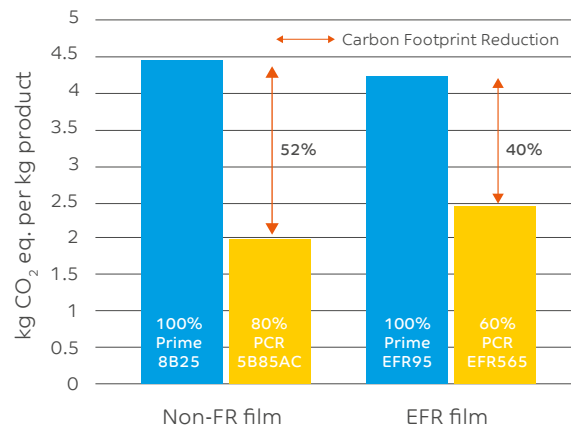


SABIC Functional Forms introduces a new portfolio of Post-Consumer Recycled films, the latest addition to LEXAN™ polycarbonate film for high-end sustainable solutions, to meet the global recycling challenges.

SABIC's vision for the future involves a world where plastics never end up in our environment, landfills or oceans. To integrate different dimensions of sustainability into the business's core strategy, SABIC's scientists are continually striving to find innovative ways to recycle plastics and remake them into new products to reduce the global environmental footprint.

As part of SABIC's TRUCIRCLE™ portfolio, showcasing our circular innovations, we produce LEXAN™ EFR and non-FR film portfolio from Post-Consumer Recycled (PCR) resins that offer equivalent performance to our virgin polycarbonate films.

ENVIRONMENTAL IMPACT OF PCR FILM SOLUTIONS\*



\* Global Warming Potential IPCC 2013 GWP 100a V1.03

LEXAN POLYCARBONATE FILM MADE OF PCR (POST-CONSUMER RECYCLED) RESINS

PCR NON-FR FILM



- Non Flame Retardant film
- Printability without pre-treatment
- Easy thermoforming and hydro-forming
- Suitable for printing and labeling

PCR EFR FILM



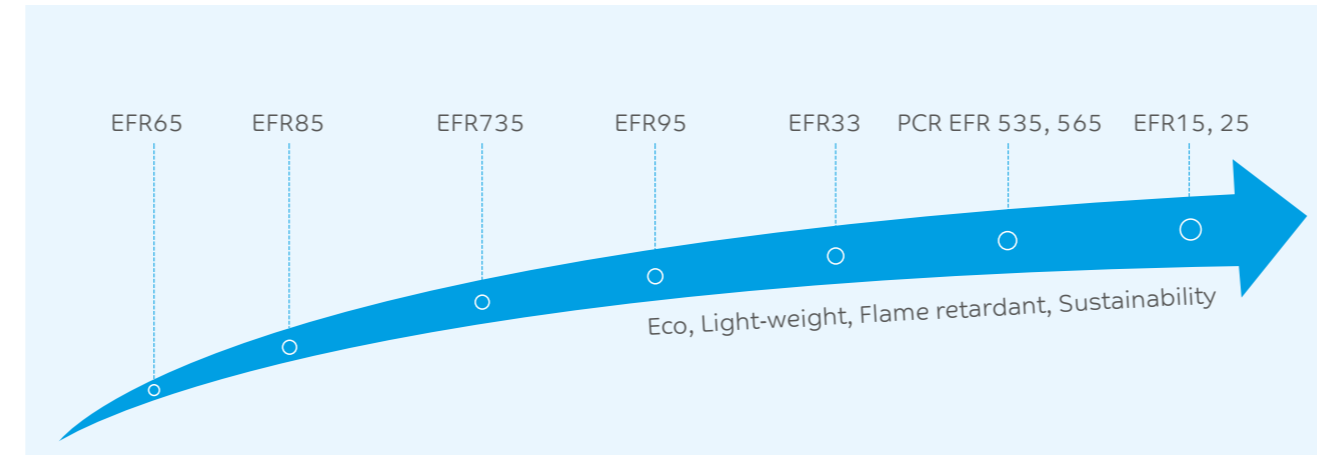
- Eco and flame-retardant film
- UL-94 recognition (VTM-0 to V-0)
- Suitable for electrical & electronics industry e.g. EV battery packs

# LEXAN™ PCR EFR FILM SOLUTIONS









New LEXAN™ EFR535 (30% PCR) and EFR565 (60% PCR) are PCR flame-retardant polycarbonate films, presenting excellent eco solutions for global **Electrical & Electronics** manufacturers to go beyond current ecological directives by voluntarily eliminating halogenated additives in their products. These new films provide excellent EFR technology in non-Bromine and Chlorine.



## SABIC LEXAN EFR FILM EVOLUTION



## BENEFITS:

-  EXCELLENT ELECTRICAL AND MECHANICAL PROPERTIES
-  HIGH CHEMICAL AND HYDROLYTIC RESISTANCE
-  UL-94 RECOGNITION, VTM-0 TO V-0
-  COMPATIBILITY WITH ADHESIVES
-  OPTIMAL DIMENSIONAL STABILITY AT HIGH TEMPERATURES
-  ECO FLAME RETARDANT
-  EXCELLENT PUNCTURE RESISTANCE
-  NO CHLORINE OR BROMINE COMPLIANCE

## POTENTIAL APPLICATIONS:

- Battery packs and adaptors for computers, laptops, mobile phones
- Heat/dielectric shielding and insulation barriers
- Die-cut insulators and spacers
- Labels and overlays e.g. home appliances

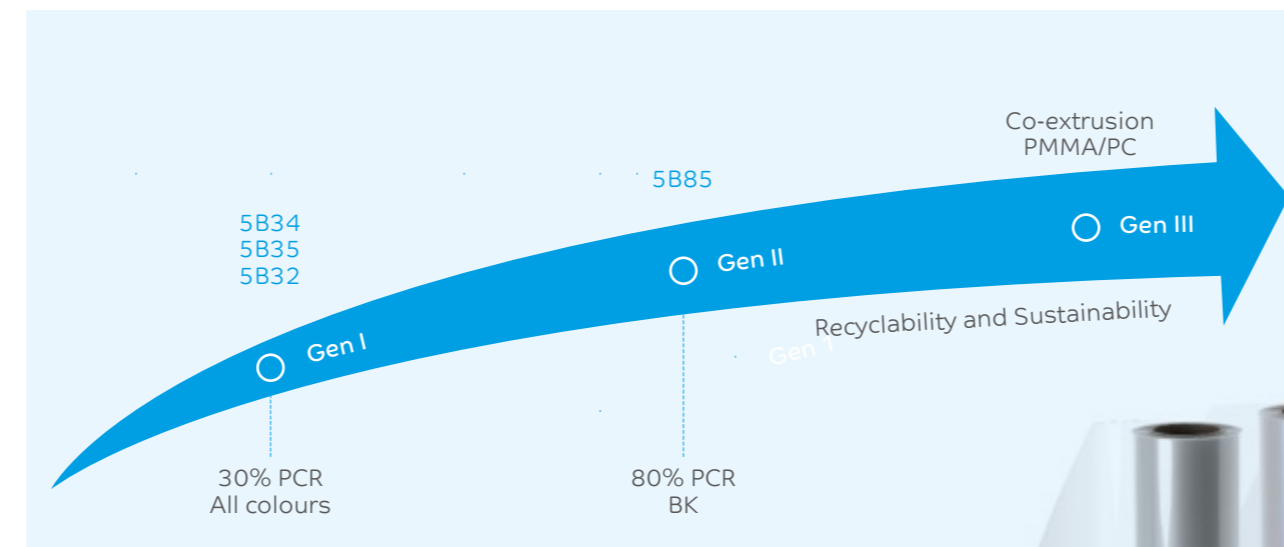
# LEXAN PCR NON-FR FILM SOLUTIONS

LEXAN™ Non-FR PCR PC films are made of 30% to 80% PCR resins, which can deliver 25~ 50% more reduction in carbon footprint depending on the grade and are available with two sides textured or one side polished / one side textured surface.



This Post-Consumer recycled polycarbonate film offers high-temperature resistance, significant dimensional stability, and excellent printability (no need for pretreatment). It is a suitable solution for multi-layer printing and can be screen printed using traditional solvent-based or water-based inks and UV or infrared drying inks.

## NON-FR PCR FILM GRADES



## BENEFITS:

-  EXCELLENT DIMENSIONAL STABILITY
-  HIGH IMPACT RESISTANCE
-  EASE OF THERMOFORMING, HYDRO-FORMING, AND BENDING
-  EASE OF EMBOSsing AND DIE-CUTTING
-  SCRATCH AND WEAR RESISTANCE ON TEXTURED SIDES AND MAR RESISTANCE ON POLISHED SIDE
-  PRINTABILITY WITHOUT PRE-TREATMENT

## POTENTIAL APPLICATIONS:

- Multi-layer printing applications, such as overlays
- High-performance labeling for home appliances
- Suitable for forming and die-cutting
- Suitable for screen printing
- LED / LCD or displays for audio and video equipment
- Automotive dashboard and interior applications

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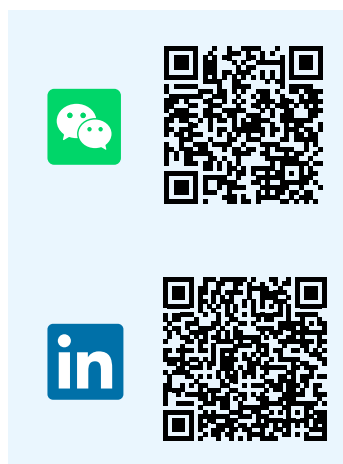
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