

CHEMISTRY THAT MATTERS™



LÖSUNGEN FÜR "ENERGY TRANSITION"

Edwin Verhorst, Market Development and Technical Marketing Europe

Oberriet
September 24, 2025

SABIC AT A GLANCE

SABIC AT A GLANCE

1976



SABIC Founded

2002



Acquired DSM
Petrochemicals

2007



Acquired GE Plastics

2020



Saudi Aramco acquires a
70% stake in SABIC

2025



SABIC is #2 most valuable
brand in chemicals
industry.
(Brand Value US\$4.9bn)*

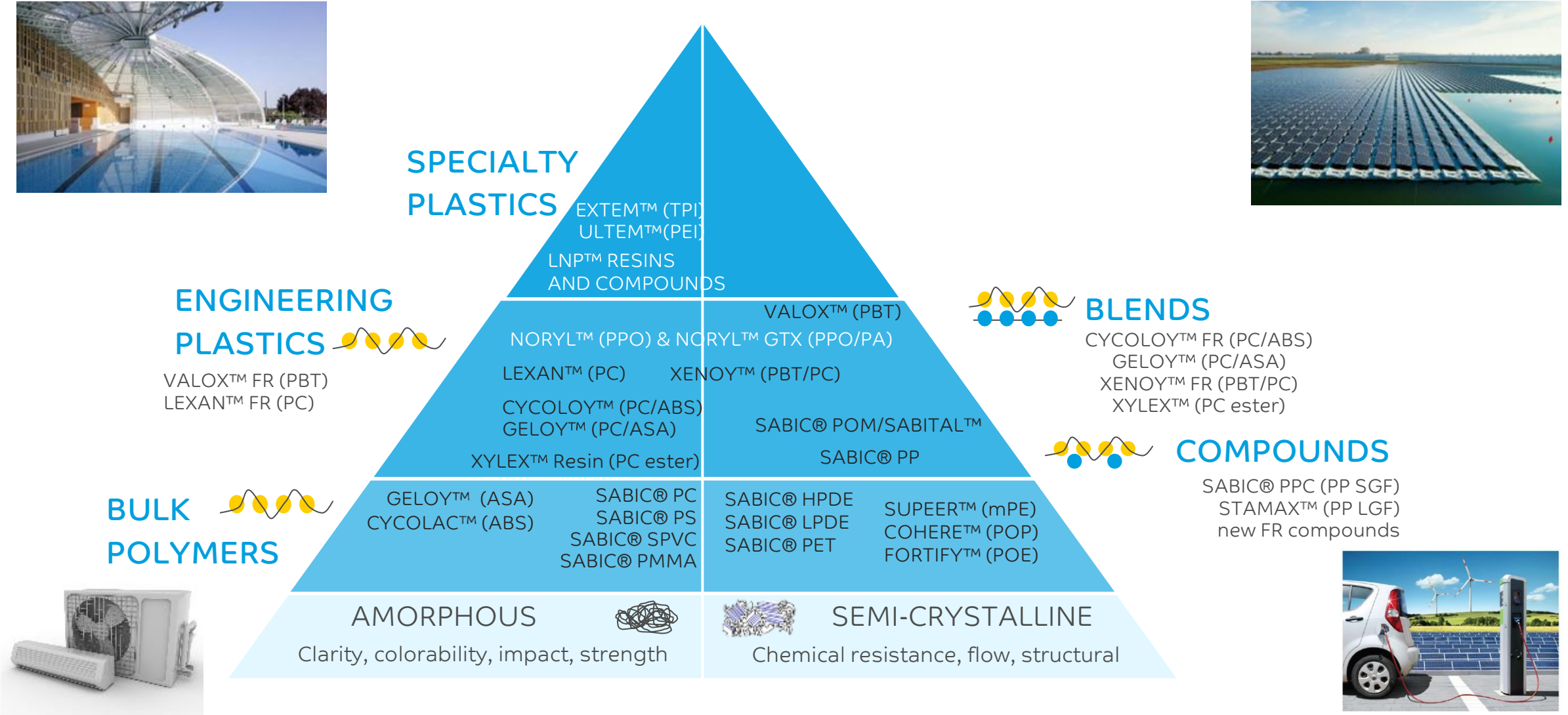


SABIC'S GLOBAL FOOTPRINT



- 28,000+** Employees around the world
- 43** Countries of operation
- 60** Manufacturing/compounding sites
- 140+** Countries served
- 20** Technology centers and service locations
- 2,000+** R&D employees
(Including non-direct hire employees)

THE THERMOPLASTICS PRODUCT PYRAMID – SABIC’S PORTFOLIO



*Dark color = Polymers SBU, White color = Specialties BU

STRATEGIC INDUSTRIES WE SERVE



AGRICULTURE

Our portfolio of high quality agri-nutrients play a vital role in helping to secure adequate global food supply and make it possible to produce more food from less land.



ELECTRICAL & ELECTRONICS

Manufacturers need to make products in a cost-effective manner, yet meet consumers' expectations for style, ease of use and sustainability. Our materials are the foundation for the next generation of electronic devices.



AUTOMOTIVE

Automobiles, aircraft, rail interiors, heavy-duty trucks and other vehicles require new approaches to meet ever-rising requirements. We put our material, design and technical expertise to work to help OEMs meet this challenge and drive innovation to new levels.



HEALTHCARE & HYGIENE

We help customers successfully address the challenges facing the industry by providing advanced technologies, a broad product portfolio, and a healthcare product policy to help support our customers in achieving regulatory compliance.



BUILDING & CONSTRUCTION

We provide products to architects and builders who seek solutions to satisfy public demand for environmentally responsible structures while providing design freedom.



PACKAGING

SABIC polymers seek to help food and drink producers meet their goals while still providing sustainable benefits like lightweighting and environmentally-focused initiatives.



CONSUMER PRODUCTS

SABIC offers tailor-made solutions to consumer goods & appliances industry; that supports design for recyclability and offer compliance with safety regulations while providing enhanced aesthetic appeal.

TRUCIRCLE™ PROGRAM

CERTIFIED BIO-RENEWABLE POLYMERS

SABIC'S CERTIFIED BIO-RENEWABLE POLYCARBONATE



BASED ON CERTIFIED BIO-RENEWABLE FEEDSTOCK
UP TO 90% CO₂ FOOTPRINT REDUCTION FOR EACH
KG OF POLYCARBONATE
TRADITIONAL FEEDSTOCK DEPLETION REDUCTION
BASED ON A MASS BALANCE APPROACH
CERTIFIED BY ISCC PLUS

All promotable LEXAN™ grades can be made available as certified bio-renewable version.

Certified bio-renewable product types:

RW TYPES:

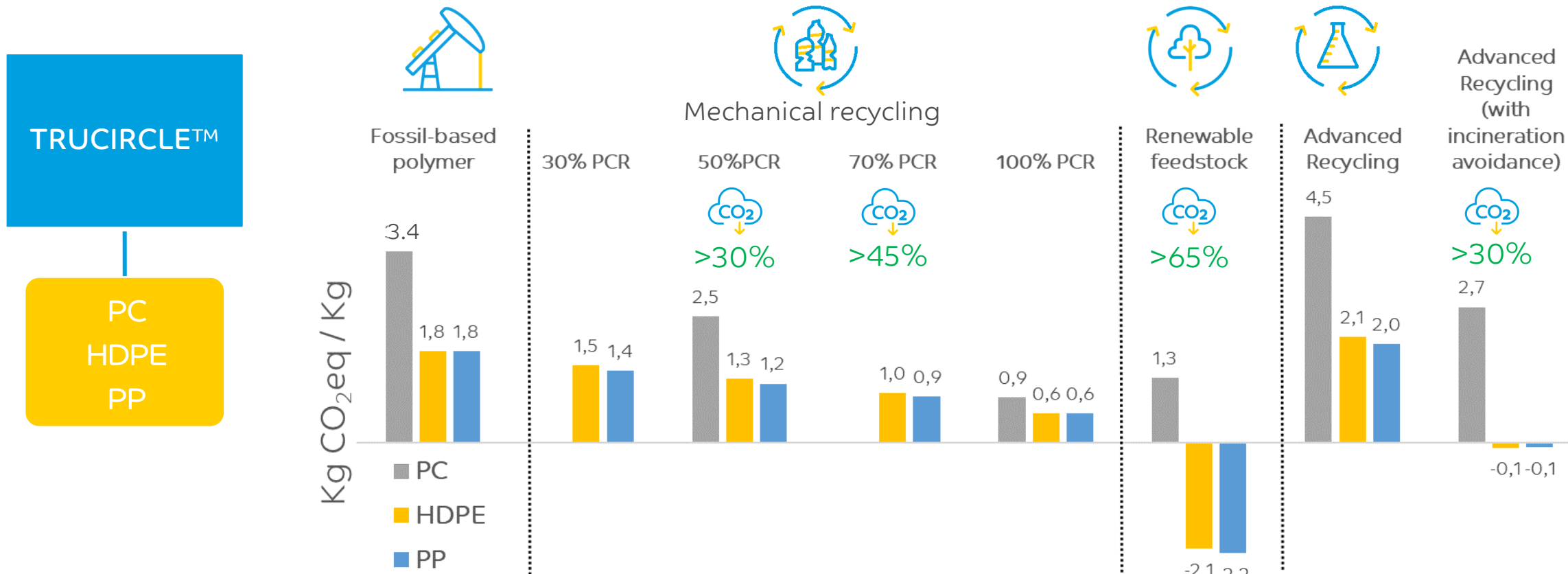
PC based on renewable /
bio-based Phenol

Up to 70% bio-circular content
RW suffix in color nomenclature
e.g. LEXAN™ 123R-111RW

RA TYPES :

PC based on renewable /
bio-based Phenol and Acetone
Up to 90% bio-circular content
RA suffix in color nomenclature
e.g. LEXAN™ 123R-111RA

SABIC'S TRUCIRCLE™ CARBON FOOTPRINT COMPARISON - VARIOUS SOLUTIONS



SUSTAINABLE – LOW CO₂ FOOTPRINT

*Potential carbon footprint reduction of >65%, depending on TRUCIRCLE™ solution



SABIC'S TRUCIRCLE™ SOLUTIONS

Support our customers with effective solutions towards carbon neutrality

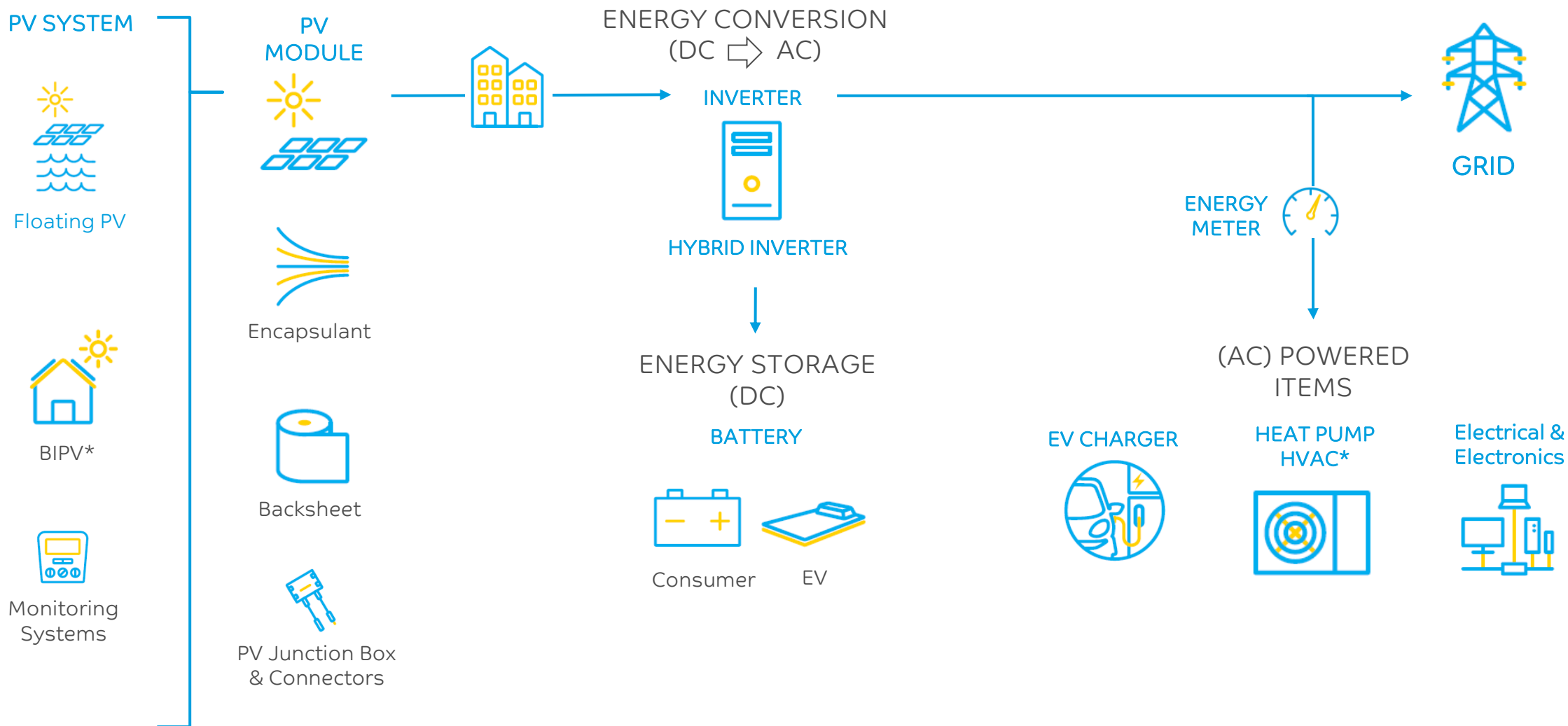
ENERGY TRANSITION

EXPANDED FUTURE FOCUS

- Energy storage solutions
- Charging infrastructure
- Other modes of transport
- Industrial & consumer equipment
- Energy distribution

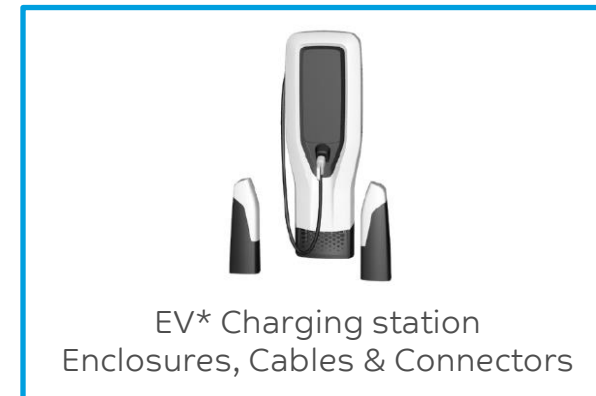
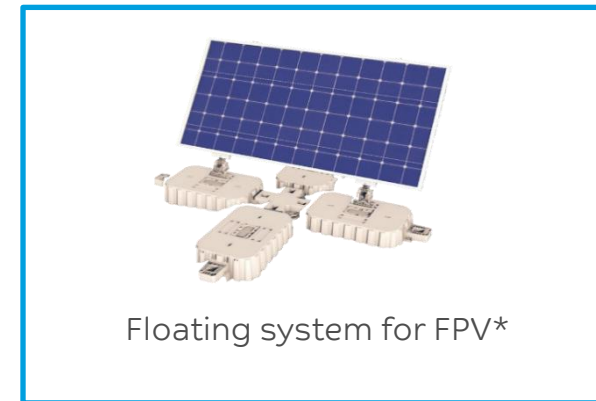
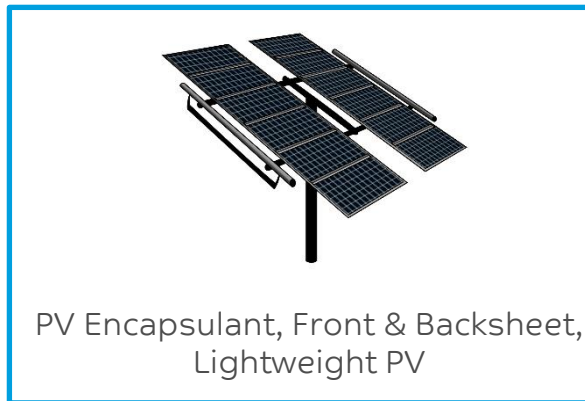
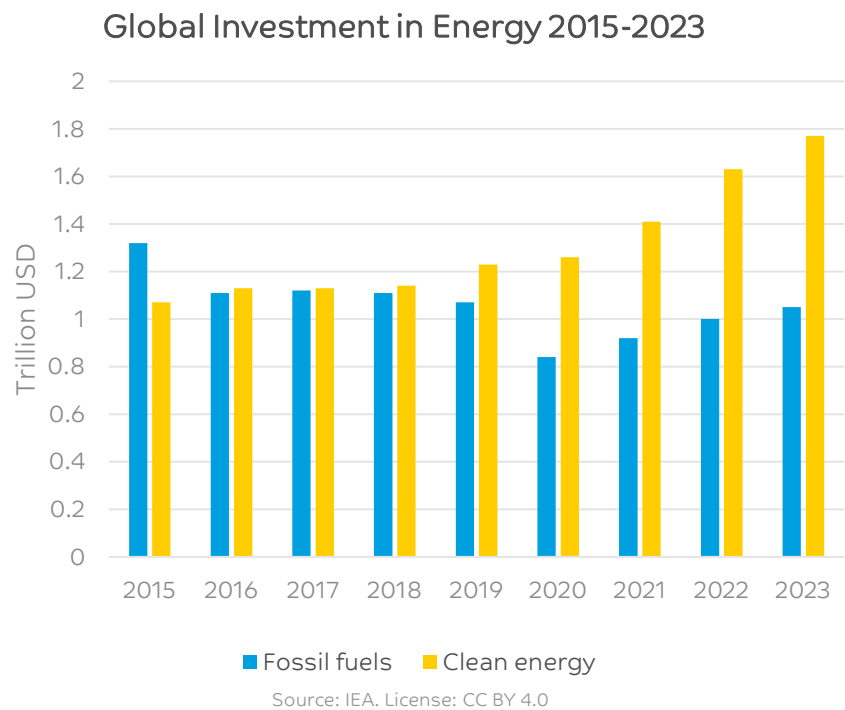


SABIC SOLUTIONS FOR ENERGY TRANSITION



*BIPV : Building Integrated PhotoVoltaics , HVAC : Heating, Ventilation and Air Conditioning

PLASTICS BOOSTING ENERGY TRANSITION GROWTH



THERMOPLASTICS ENABLE INDUSTRY GROWTH - INCREASING PRODUCTIVITY WITH FREEDOM OF DESIGN

*EV : Electrical Vehicle, FPV : Floating Photo Voltaic

(RESIDENTIAL) CHARGING SYSTEMS

FASCIA

LEXAN™ 945U (PC) opaque
LEXAN™ 945AU (PC) Transparent

- UL746C f1
- UL94 V0 @ 2.0mm
- CTI PLC 0
- Non Cl & Br content
- ISO179 Charpy impact at 23°C: 15 kJ/m² (notched)
- UL 746B RTI: 90°C (with impact)

CONSOLE

CYCOLOY™ CY6310 (PC/ABS)
V0 @ 1.5mm resin

FRAME / BACKPLATE

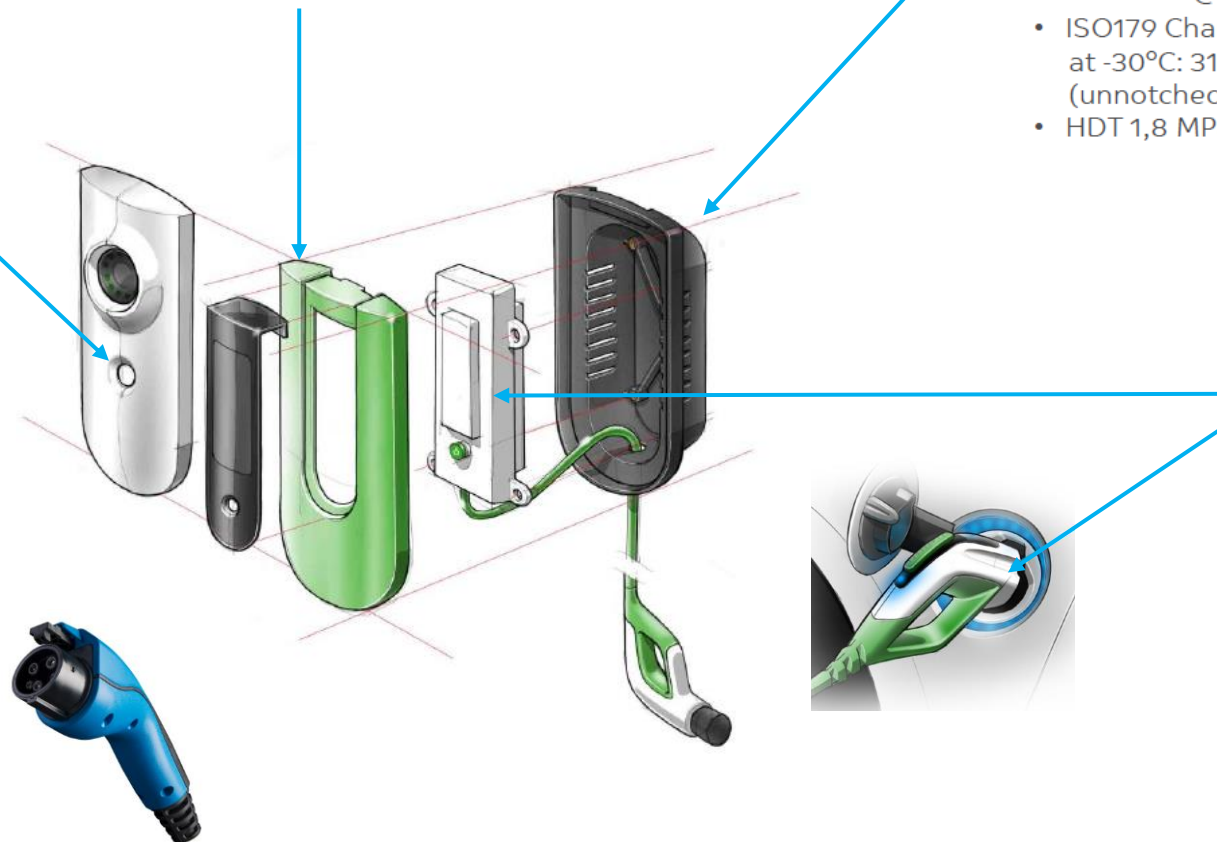
LEXAN™ 503R (PC) resin

- UL94 V0 @ 3.0mm
- ISO179 Charpy impact at -30°C: 313 kJ/m² (unnotched)
- HDT 1,8 MPa ISO75: 134°C

CONNECTOR & SOCKET





VALOX™ 357XU (PBT/PC) resin

- UL94 V0 @ 0.75 mm
- UL94 5VA @ 2.5 mm
- UL746C f1 rating
- GWIT 825°C
- RTI 120°C (Elec/impact/strength)
- BPT 125°C
- ISO179 Charpy Impact -30°C: No break (Unnotched)
Passes drive over test




CASE STUDY: CHARGE AMPS – EV CHARGER

CERTIFIED RENEWABLE LEXAN™ POLYCARBONATE FOR ELECTRIC VEHICLE CHARGER HOUSINGS

-  GOOD ELECTRICAL PERFORMANCE
-  WEATHERABILITY
-  ENABLING ELECTRIC VEHICLES
-  HIGH IMPACT STRENGTH



[SABIC - SABIC REDUCES CARBON FOOTPRINT IN COLLABORATION WITH CHARGE AMPS](#)

Charge Amps Dawn Chassis up to 50% percent of ISCC PLUS certified bio-based renewable material  **CHARGE AMPS**

BATTERY APPLICATIONS AND SUCCESS STORIES

SABIC THERMOPLASTIC SOLUTIONS FOR BATTERY PACKS : MATERIALS & CRITICAL PROPERTIES BY APPLICATION

Top cover

- EMI shielding
- Flame retardance
- Good mechanics
- **Target polymers : STAMAX™ PP-FR**

Module cover and housing

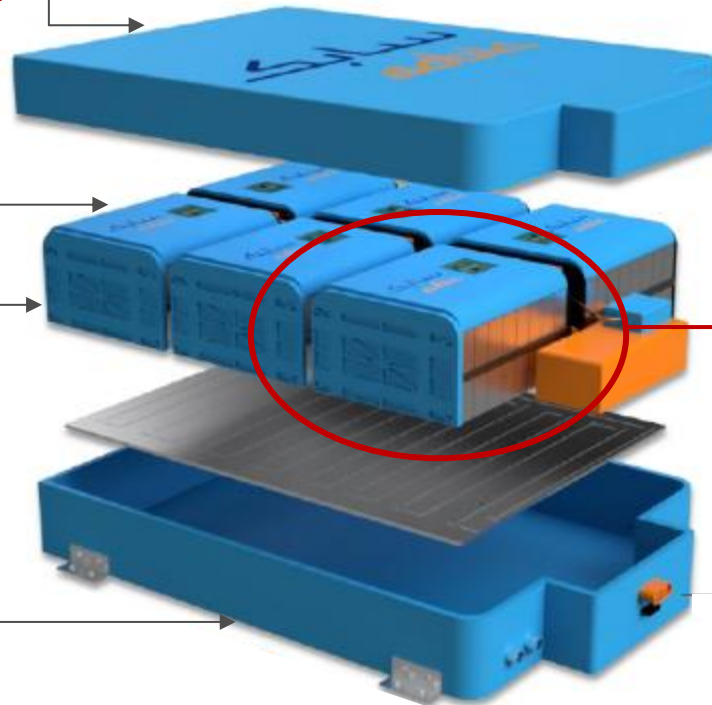
- Flame retardance
- Adhesion properties
- High CTI
- **Target polymers : STAMAX™ PP-FR, CYCOLOY™ PC/ABS-FR, VALOX™ PBT-FR**

Pressure end-plate

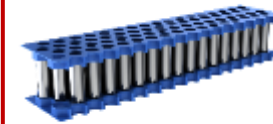
- High mechanics
- Flame retardance
- **Target polymers : VALOX™ PBT-FR, STAMAX™ PP-FR**

Bottom tray

- High ductility
- Flame retardance
- **Target polymers : STAMAX™ PP-FR**

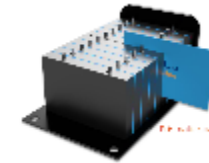


Module components



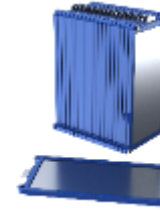
Cylindrical cell holder

- Flame retardance
- High flow
- **Target polymers : CYCOLOY™ PC/ABS-FR**



Prismatic cell spacer

- Flame retardance
- Dimensional stability
- **Target polymers : STAMAX™ PP-FR**



Pouch cell cassette/end-caps

- Flame retardance
- High CTI
- **Target polymers : CYCOLOY™ PC/ABS-FR**



Busbar holder

- Flame retardance
- Dimensional stability
- **Target polymers : SABIC® PPc FR**

DEVELOPMENTS ON THE ROAD

HONDA



- Battery pack top cover
- Part size : 1600 x 1000 x 200 mm
- Part thickness : 2mm
- 40% lighter vs. Metal

PPc
(PP-FR/SGF30)



- Module end-caps
- Superior fire resistance versus aluminum and other FR polymers
- Up to 10% cost saving vs. die cast aluminum

STAMAX™
(PP-FR/LGF30)

LUCID



- Battery module housing and cell holder
- One shot injection moulding process of aluminum busbars

LEXANT™
(PC-FR/GF20)

bluebus



- Improving safety standards: ability to evacuate passengers within prescribed time in a safe manner
- Adapt solution to current battery pack design for retrofitting purpose
- Improved thermal & electrical insulation
- Lighter solution than metal + thermal blankets

STAMAX™
(PP-FR/LGF30)

NEW DEVELOPMENT GRADE HIGHLIGHTS

VALOX™ SHF4320

MATERIAL DESCRIPTION

VALOX™ SHF4320 is a 10% glass filled PBT resin developed for applications like thin wall automotive connectors. This grade offers improved flow along with excellent electrical properties (CTI 600V) and heat performance (HDT > 180C).

TYPICAL INDUSTRY REQUIREMENTS:

- Electrical Insulation, High Voltage applications
- Faster cycle time
- Higher thermal Performance, at relative low GF loading
- Snap fit / Hinge design possibilities

VALOX™ SHF4320 VALUE PROPOSITION

- CTI 600V, both ASTM and IEC listed on UL-YC
- MVR = 23 cm³/10min (250°C/2.16kg).
MV = 90 Pa.s (260C/1500s-1)
- HDT > 180°C
- Elongation at break > 3%



VALOX™ SHF3800UX

MATERIAL DESCRIPTION

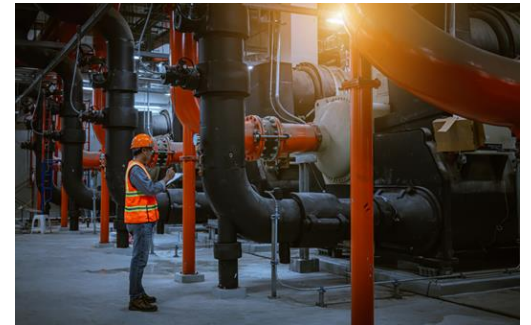
VALOX™ SHF3800UX is an **unreinforced, UV stabilized, impact modified** flame-retardant Polybutylene Terephthalate/Polycarbonate (PBT/PC) injection moldable grade with improved flow characteristics. It has excellent chemical resistance and a **UL94V0@0.75mm** and **5VA@2.5mm** flame rating. This is a good candidate for applications in the **electrical industry** including bobbins, switches, and enclosures.

TYPICAL INDUSTRY REQUIREMENTS:

- Flame retardant properties
- Thin wall processing
- High impact
- Suitable for outdoor use
- High temperature stability

VALOX™ SHF3800UX VALUE PROPOSITION:

- UL 94, V0 @ 0.75mm & 5VA @ 2.5mm
- MVR = 11 cm³/10min (250°C/5.0kg)
- Izod notched 23°C = 40 kJ/m²
- UL746C, f1 listing
- RTI = 140 – 120 – 120 (M / I / E)



LEXAN™ BPL1000 RESIN

MATERIAL DESCRIPTION

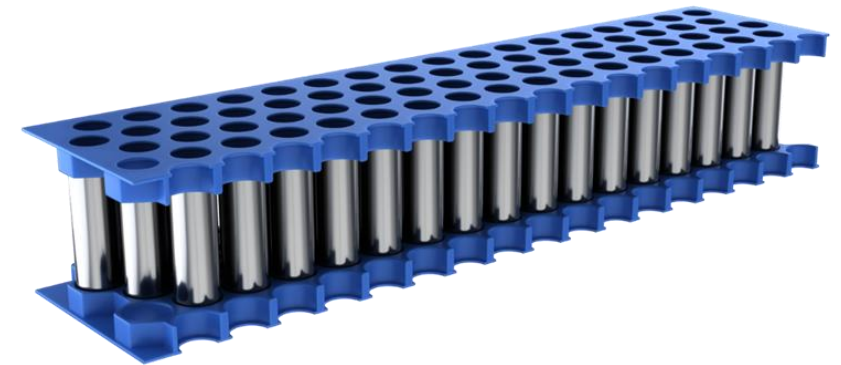
LEXAN™ BPL1000 Resin is an impact modified PC that combines thin wall **flame retardancy** and high flow properties, while being **non-brominated/ non-chlorinated FR**. The improved ductility and flow make LEXAN™ BPL1000 a potential candidate for applications in the **E&E industry** such as battery enclosures and cell holders with thin wall design.

TYPICAL INDUSTRY REQUIREMENTS

- High impact properties
- Thin Wall UL Listing
- Long-term stable properties
- Meet WEEE/RoHS Regulation
- REACH compliant

LEXAN™ BPL1000 TYPICAL MATERIAL CHARACTERISTICS

- Notched Izod Impact 40 kJ/m²
- UL94 V0 @ 0.8 mm.
- HDT 96°C
- CTI : 600V
- Non-brominated/ non chlorinated Flame-retardant



K'2025

DÜSSELDORF

VISIT US AT K2025

SABIC: **Hall 6 Booth D42**;
Messe Düsseldorf, Germany



Our 2025 theme:

“CONNECTING EVERYDAY LIFE”

Highlights how SABIC’s innovations play a vital role in shaping the products, solutions and experiences that matter most in our daily life.



Experience the following areas on our booth: **Live, Move, Work, Shop, and Care.**

STAY CONNECTED WITH US



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THANK YOU

