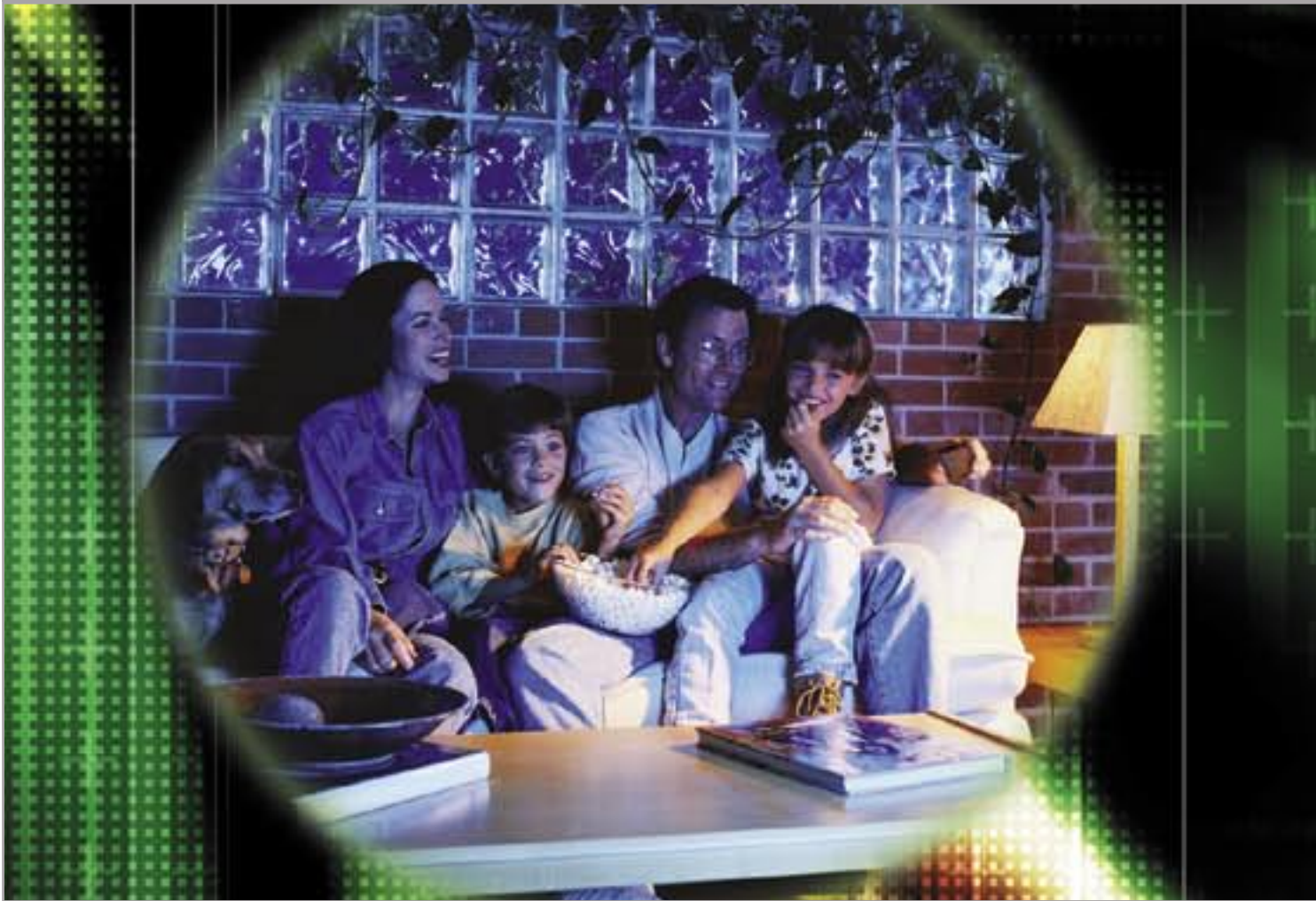


Resins for the electronics industry



Products for LCD, plasma and CRT  
screens and components

SABIC Innovative Plastics provides a wide and diverse market basket of resins to meet the demanding needs of TV displays for today and tomorrow.

Whether LCD, plasma or CRT, from screens to components, from wire insulation to enclosures, these value-added materials mean you can produce better products at lower costs.

For TV enclosures, a number of Cycloy\* and Noryl\* resin grades offer bromine- and chlorine-free (Br- AND Cl-free) flame retardant systems intended to meet with WEEE/RoHs and other voluntary environmental labels, along with well-balanced mechanical, heat and flow properties. And newly developed high scratch resistance Br- and Cl-free FR Lexan\* DMX and Noryl resins allow “paintless” TV bezels. In addition, Lexan DMX features outstanding surface hardness, transparency and molding capability for special TV bezel designs such as overmolding and translucent bezels.



# SABIC Innovative Plastics provides various material selections for TV bezel design differentiation

Visualfx\* resin with special effects such as metallics, earthtones and metameric colors that change according to lighting conditions

- Lexan\* DMX resin – high surface hardness, transparency, FR and overmolding capability
- Lexan IMD film – supports a paintless bezel approach
- Illuminex\* diffuser films a new standard in light transmission and dimensional stability (as well as diffuser sheet and plate); superior temperature and dimensional stability for backlighting components in LCD televisions
- Ultem\* high-performance films provide the electrical insulation required inside LCD displays, where parts like inverters used in back-light modules need high temperature resistance, high dielectric strength, RoHS compliance and a UL VTM-0 listing
- For rear cabinet, internal frame, plasma panels and glass stripe assembly parts, SABIC Innovative Plastics provides several metal replacement options:
  - LNP\* Faradex\* resin Br- and Cl-free FR and EMI-shielding plastic solutions for replacing metal rear cabinets
  - LNP Thermocomp\* and CEP grades high stiffness properties also make them ideal candidates to replace metal rear cabinets
  - Lexan and Noryl\* glass-filled resins high modulus and stiffness for internal frame applications
  - LNP Konduit\* resin offers thermal conductivity
  - LNP Vertron\* resin with ultra-high stiffness
- Lexan BFL resin series – thin-wall molding and good mold release for back light frame applications; portfolio offers both high light reflectivity and light blocking capability for broad range of design needs
- Flexible Noryl resin for wire and cable supports halogen-free wire and cable with robust VW1 performance; complies with global eco-friendly requests; helps keep television manufacturers on the cutting edge
- SABIC Innovative Plastics' offerings for stand and speaker parts include
  - LNP Vertron resin long fiber reinforced thermoplastic provides high stiffness for metal replacement
  - LNP Lubricomp\* resin ideal candidate for hinge applications
  - Visualfx resin for special design applications and paintless solutions
  - Enduran\* resin for sound and vibration absorption with better acoustic performance and also ceramic feel surface
- Ultem resin for high heat optical device frame high heat performance, dimensional stability and low out-gassing can be used for interior components such as lamps, lens and prism fixtures for rear projection TVs or projectors
- Noryl resin for DY offers Br- and Cl-free FR in addition to good flow and heat resistance. Noryl LTA1350 is an excellent grade for slim TV display. Long-term heat aging performance at higher temperatures is of major concern for the newly commercialized slim TVs due to heat accumulation within CRT tubes.

## Display bezel

- Cycloxy\* resins, Noryl\* resins
  - Br- and Cl-free FR
  - High heat
  - High flow
- High gloss Noryl resin
  - Br- and Cl-free FR
  - Scratch resistance
- Lexan\* DMX resin
  - Outstanding scratch resistance
  - Both transparent and opaque capable
  - Br- and Cl-free FR
- Cycloxy EFX EFX830ME grade
  - Silver paint replacement
- Lexan IMD Film T2F Series
  - Good formability for in-mold decorating

## Wire & cable

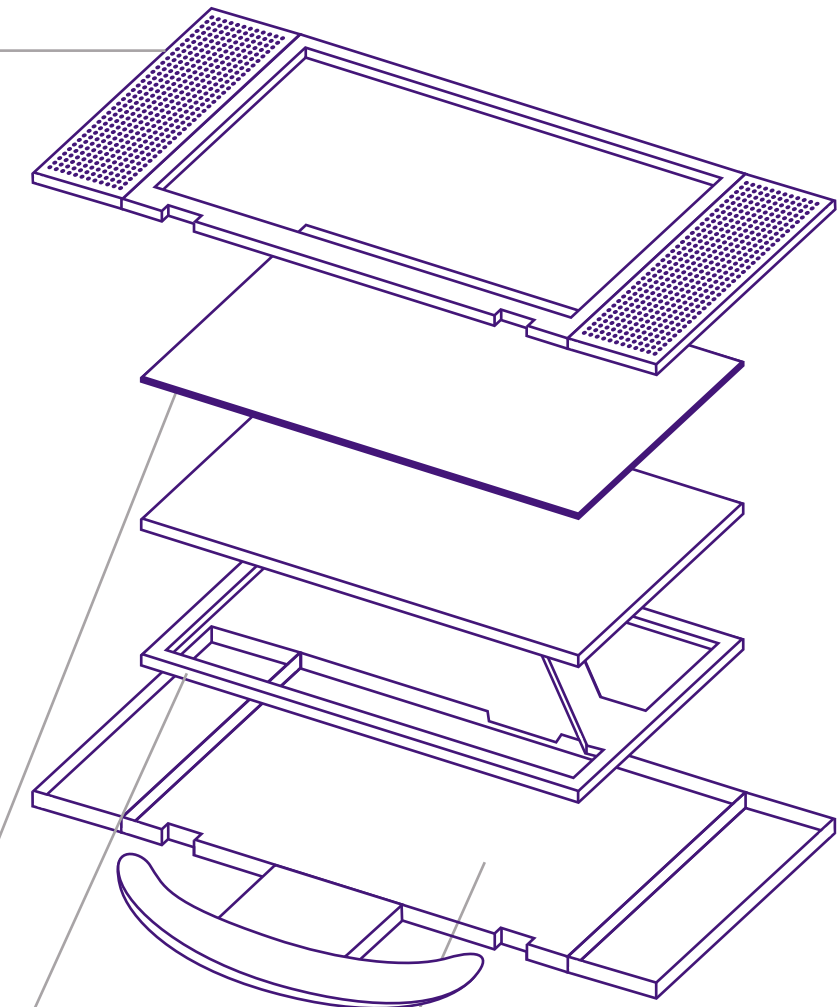
- Flexible Noryl resin as PVC-free wire insulation
  - VW1
  - Halogen-free
  - UL 80°C and 105°C

## Display film

- Lexan Illuminex\* film
  - No coating failures

## Back light frame

- Lexan BFL series
  - Br- and Cl-free FR
  - High light reflectance
  - UV resistance
  - Low warpage



## Display back

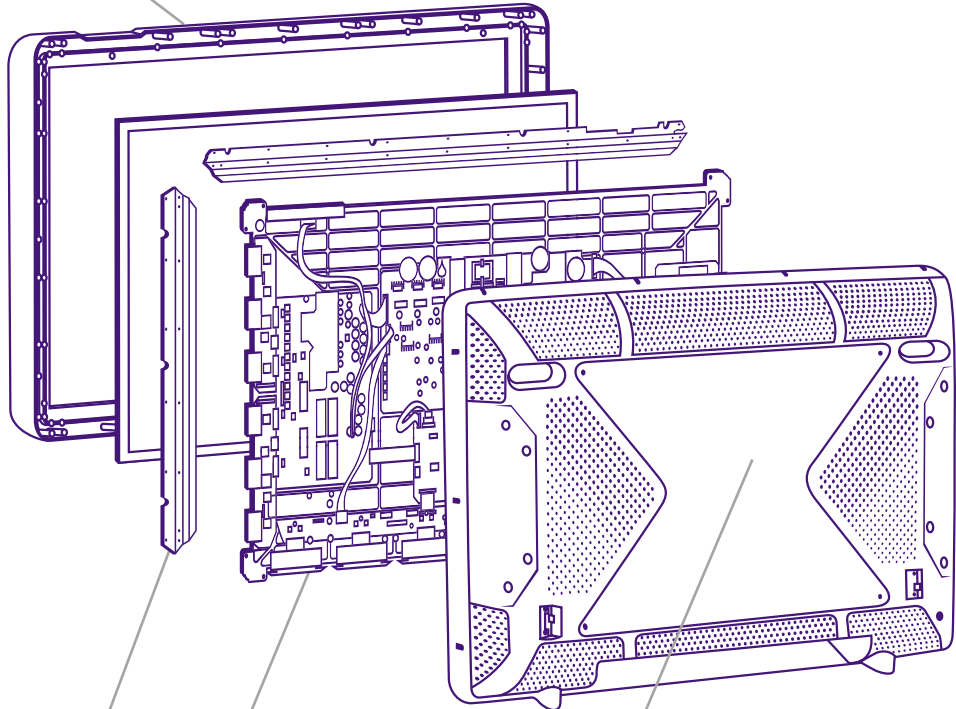
- LNP\* Thermocomp\* grades
  - Metal replacement
  - High stiffness
- LNP Faradex\* grades
  - Br- and Cl-free FR
  - Metal replacement
  - EMI shielding
- LNP CEP C7 Series
  - Br- and Cl-free FR
  - Moderate stiffness

## Stand & speaker

- LNP Vertron\* resin
  - Metal replacement
  - Ultra-high stiffness
- LNP Lubricomp\* resin
  - Wear and abrasion resistance
- Cycloxy EFX EFX830ME grade
  - Silver paint replacement
- Enduran\* V7390 resin
  - Sound/vibration absorption
  - Ceramic feel

## Display bezel

- Cycoloy\* resins, Noryl\* resins
  - Br- and Cl-free FR
  - High heat
  - High flow
- High gloss Noryl resin
  - Br- and Cl-free FR
  - Scratch resistance
- Lexan\* DMX resin
  - Outstanding scratch resistance
  - Both transparent and opaque capable
  - Br- and Cl-free FR
- Cycloley Efx EFX830ME grade
  - Silver paint replacement
- Lexan IMD Film T2F series
  - Good formability for in-mold decorating



## Wire & cable

- Flexible Noryl resin as PVC-free wire insulation
  - VW1
  - Halogen-free
  - UL 80°C and 105°C

## Glass stripe

- LNP\* Vertron\* resin
  - Metal replacement
  - Ultra-high stiffness

## Plasma panel

- LNP Konduit\* resin
  - Thermal conductivity
- LNP Vertron resin
  - Metal replacement
  - Ultra-high stiffness

## Display back

- LNP Thermocomp\* grades
  - Metal replacement
  - High stiffness
- LNP Faradex\* grades
  - Metal replacement
  - EMI shielding
- LNP CEP C7 series
  - Br- and Cl-free FR
  - Moderate stiffness

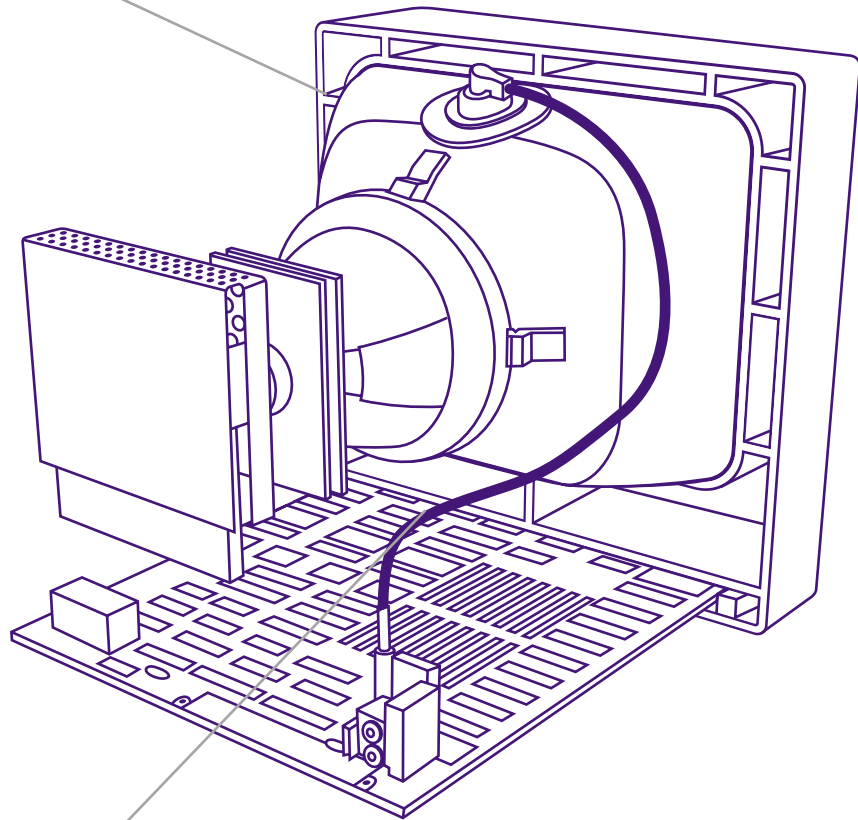
## Stand & speaker

- LNP Vertron resin
  - Metal replacement
  - Ultra-high stiffness
- LNP Lubricomp\* resin
  - Wear and abrasion resistance
- Cycloley Efx EFX830ME grade
  - Silver paint replacement
- Enduran\* V7390 resin
  - Sound/vibration absorption
  - Ceramic feel

## CRT displays

### Display bezel

- Cycloley\* resins, Noryl\* resins
  - Br- and Cl-free FR
  - High heat
  - High flow
- High gloss Noryl resin
  - Br- and Cl-free FR
  - Scratch resistance
- Lexan\* DMX resin
  - Outstanding scratch resistance
  - Both transparent and opaque capable
  - Br- and Cl-free FR
- Cycloley Efx EFX830ME grade
  - Silver paint replacement
- Lexan IMD Film T2F Series
  - Good formability for in-mold decorating



### Internals

- Noryl resin for deflection yoke
  - Br- and Cl-free FR
  - High heat
  - High flow
- Noryl resin for chassis and other E/E Components
  - Br- and Cl-free FR
  - Dimensional stability
- Ultem\* 1000 resin
  - Br- and Cl-free FR
  - High heat
  - High RTI

### Wire & cable

- Flexible Noryl resin as PVC-free wire insulation
  - VW1
  - Halogen-free
  - UL 80°C and 105°C

### Speaker

- Enduran\* V7390 resin
  - Sound/vibration absorption
  - Acoustics



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