Powering Ideas

We are a global materials company at the intersection of people, technology and customers.
We are Styron

• Styron is a leading global materials company with a unique portfolio of products that share feedstocks, operations, customers and end users.

• Building on more than seven decades of manufacturing, commercial and technological expertise, we’re passionately focused on delivering high performance products and innovative thinking to our customers.

A Strong Track Record, A Bold Direction
Fast Facts

• Styron was founded on a unique combination of strong capabilities – strong market positions, world-class production assets and leading technology.

• 2100 employees, based in 25 countries

• 67 manufacturing plants at 20 manufacturing sites around the world

• Part of Dow Chemical until 2010

• Leader in our key products: plastics, latex and rubber
## Styron Portfolio Overview

### Emulsion Polymers Division

<table>
<thead>
<tr>
<th>Businesses and Key products</th>
<th>Brands</th>
<th>End uses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Latex</strong></td>
<td>LOMAX™</td>
<td><img src="image1.png" alt="Tire" /></td>
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<tr>
<td>Styrene Butadiene (SB) Latex</td>
<td>MaxCoat™</td>
<td><img src="image2.png" alt="Car" /></td>
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<tr>
<td>Styrene Acrylate (SA) Latex</td>
<td>FOUNDATIONS™</td>
<td><img src="image3.png" alt="Drill" /></td>
</tr>
<tr>
<td><strong>Rubber</strong></td>
<td>HPL™</td>
<td><img src="image3.png" alt="Drill" /></td>
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<tr>
<td>Solution Styrene Butadiene Rubber (SSBR)</td>
<td>ProForte™</td>
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<tr>
<td>Lithium Polybutadiene Rubber (Li-PBR)</td>
<td>MaxFoS™</td>
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<tr>
<td>Emulsion Styrene Butadiene Rubber (ESBR)</td>
<td>ProWeb</td>
<td><img src="image3.png" alt="Drill" /></td>
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<tr>
<td>Nickel Polybutadiene Rubber (Ni-PBR)</td>
<td>ENVERSA™</td>
<td><img src="image3.png" alt="Drill" /></td>
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### Plastics Division

<table>
<thead>
<tr>
<th>Styrenics</th>
<th>Styrene (PS)</th>
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<tbody>
<tr>
<td>Acrylonitrile Butadiene Styrene (ABS)</td>
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<tr>
<td>Styrene Acrylonitrile (SAN)</td>
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<tr>
<td>Expandable Polystyrene (EPS)</td>
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<td>Feedstocks</td>
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<table>
<thead>
<tr>
<th>Engineered Polymers</th>
<th>Polycarbonate (PC)</th>
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<tbody>
<tr>
<td>Compounds &amp; Blends (C&amp;B)</td>
<td></td>
</tr>
<tr>
<td>Automotive Plastics</td>
<td></td>
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<table>
<thead>
<tr>
<th>Styrene A-TECH™</th>
<th>MAGNUM™</th>
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<tr>
<td>STYRON C-TECH™</td>
<td>PULSE™</td>
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<tr>
<td>CELEX™</td>
<td>INSPIRE™</td>
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<tr>
<td>VELVEX™</td>
<td>EMERGE™</td>
</tr>
<tr>
<td>SCONOPOR™</td>
<td>EVEREST™</td>
</tr>
<tr>
<td>CALIBRE™</td>
<td>SPRINTAN™</td>
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</tbody>
</table>

### Styrene Technologies

- LOMAX™
- MaxCoat™
- Foundations™
- HPL™
- ProForte™
- MaxFoS™
- ProWeb
- ENVERSA™
- EVEREST™
- SPRINTAN™
## Revenue

<table>
<thead>
<tr>
<th></th>
<th>2012 Sales</th>
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</thead>
<tbody>
<tr>
<td>Styron (all businesses)</td>
<td>Approximately $ 5.5 billion</td>
</tr>
<tr>
<td>Emulsion Polymers</td>
<td>Approximately $ 2.3 billion</td>
</tr>
<tr>
<td>Plastics</td>
<td>Approximately $ 3.2 billion</td>
</tr>
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</table>

### Revenue by Geography

- **Europe/MEA**
- **North America**
- **Asia Pacific**
- **Latin America**
Major Office Locations

• Styron’s global operating center is located in Berwyn, PA, U.S.A. (Philadelphia area).

• Regional operating centers:
  – North America: Midland, Michigan, U.S.A.
  – Europe: Horgen, Switzerland
  – Asia-Pacific: Hong Kong
  – Latin America: Sao Paulo, Brazil
Global Manufacturing Locations

Unmatched combination of global reach, operational excellence, expertise, leading intellectual property, world-scale assets, and global R&D presence
Integration Creates Cost Competitiveness

Legend
- Styron
- Raw materials

Customers
- Construction
- Packaging
- Appliances
- Tires
- Paper/Carpet
- Automotive
- Electrical/Electronic

Raw materials
- Cracker
- Ethylene
- Propylene
- Crude C4
- Pygas
- Butadiene
- Benzene

Compounds & Blends
- Expandable Polystyrene
- Polystyrene
- ABS/SAN
- Synthetic Rubber
- Latex
- Polycarbonate
- Polycarbonate

Polypropylene

Customers
## A Robust Innovation Pipeline

Our track record is built on a history of successful customer-driven innovations, and we continue to fuel our strong future pipeline with new opportunities.

### Emulsion Polymers
- 1st industrial production of synthetic rubber
- Dow develops styrene-butadiene latex polymer (Styarloy)

### Plastics
- Dow introduces Polystyrene to the U.S.
- PS technology is leveraged to invent Mass ABS process technology
- Two-phase interfacial polycarbonate process is invented

### Pipeline of Opportunities

<table>
<thead>
<tr>
<th>1937-1990</th>
<th>1990-2009</th>
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<tbody>
<tr>
<td><strong>Emulsion Polymers</strong></td>
<td><strong>Plastics</strong></td>
</tr>
<tr>
<td>- 1st industrial production of synthetic rubber</td>
<td>- Dow invents STYRON A-TECH™ resins for appliances, consumer electronics, packaging, appliances. Becomes PS technology leader in these applications.</td>
</tr>
<tr>
<td>- Dow develops styrene-butadiene latex polymer (Styarloy)</td>
<td>- Developed PC/ABS blends for broad market use including automotive and consumer electronics</td>
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</tbody>
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<tr>
<th><strong>1937-1990</strong></th>
<th><strong>1990-2009</strong></th>
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<tbody>
<tr>
<td><strong>Plastics</strong></td>
<td><strong>Emulsion Polymers</strong></td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- Foam latex: ENVERSA® technology</td>
</tr>
<tr>
<td>- 3rd generation functionalized SSBR for “green tires” with lower rolling resistance.</td>
<td>- Starch emulsion technology</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- Performance latex applications: adhesives, construction, consumer products</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- SSBR microstructure optimization. Rubber-filler masterbatch technology</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- New PC and PP compounds for automotive: lighter weight, solvent resistant, durable aesthetics</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- Blow molded seatbacks, tailgates.</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- CO₂RE High Density Foaming Technology for packaging</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- HIPS grades for thinner fridge liners and packaging</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td>- New PC compounds &amp; blends for smart meters, LED lighting, multi-wall sheet, PC films, IT equipment, medical devices</td>
</tr>
<tr>
<td>- Dow invents Multi-Layer Curtain Coating (MLCC) for paper &amp; board coating applications</td>
<td></td>
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</table>
Committed to Sustainability

• Styron aims to be a preferred partner for sustainable solutions.

• The people of Styron are committed to:
  – Continually innovating and developing new and improved products and processes that improve Styron’s and our customers’ sustainability.
  – Promoting the responsible use of our materials through product stewardship.
  – Operating responsibly with respect to the environment, health and safety, using resources more efficiently, adhering to the principles of Responsible Care®, and being a good neighbor in the communities where we operate.
Joint Ventures

As a leading integrated producer of polystyrene and styrene monomer, Americas Styrenics offers solutions and services to customers in a variety of markets throughout the Americas.

Ownership: Styron 50%; Chevron Phillips Chemical Company 50%

History: Americas Styrenics was formed in 2008 as a 50/50 joint venture between The Dow Chemical Company and Chevron Phillips. After Styron became an independent company, it assumed Dow's ownership share in the JV.

Headquarters location: The Woodlands, Texas

Production Facilities: Torrance, California; Gales Ferry, Connecticut; Ironton, Ohio; Joliet, Illinois; Cartagena, Colombia; St. James, Louisiana; Marietta, Ohio

Products: Polystyrene and styrene

A 50/50 joint venture between Styron and Sumitomo Chemical Co., Ltd. produces polycarbonate resins and serves customers and markets throughout Asia.

Ownership: Styron 50%, Sumitomo Chemical Co., Ltd. 50%

History: The company was originally formed as Sumitomo Dow Limited in 1996 as 50/50 joint venture between Sumitomo Chemical Co., Ltd. and The Dow Chemical Company. After Styron became an independent company, it assumed Dow's ownership share in the JV.

Headquarters location: Tokyo, Japan

Production Facilities: Niihama City, Ehime, Japan

Products: Polycarbonate
Industries and Markets We Serve

Our products touch nearly every aspect of daily life.
Industries & Markets

Automotive

Styron Automotive offers a portfolio of plastic solutions to fulfill growing demands for vehicles that perform better, are less expensive and polluting, are more comfortable and durable and are fuel-efficient and safer.

In addition to our best-in-class resins, we also have automotive-dedicated products available, such as PULSE™ Engineering Resins, VELVEX™ reinforced elastomers and INSPIRE™ performance polymers. These resins enable us to provide an extensive offering for interior and exterior applications.

Building and Construction

CALIBRE™ polycarbonate resins, MAGNUM™ ABS resins and TYRIL™ SAN resins are fabricated into sheets used in a range of construction applications.

The thermal insulation properties of SCONAPOR™ polystyrene products make them a good choice for a variety of building insulation products.

Performance Latex can be used in adhesives, mortars and structural cements, primers and stain blockers, ceiling tile, bridge deck overlays, and road surfaces.
Industries & Markets

Carpet and Artificial Turf

Carpet is stronger and more durable thanks to latex backing systems from Styron. Our products include a wide variety of latexes that impart specific physical properties to the finished carpet, including dimensional stability, stiffness and hand, and may be used to enhance performance properties including moisture barrier.

And in artificial turf, Styron latex products help to improve properties that extend the durability and appearance of the pitch.

Consumer Goods

From household goods to recreation equipment, consumers want products that look good and can handle rough play, extreme weather and heavy use.

With our portfolio of CALIBRE™ polycarbonate resins, TYRIL™ SAN resins, STYRON™ polystyrene resins, MAGNUM™ ABS resins and EMERGE™ advanced resins, we have solutions to meet these tough requirements and more.

Consumer Electronics/ I.T.

In flat-screen TVs, EMERGE™ Advanced resins and STYRON™ polystyrene resins, as well as polycarbonate and blends help provide strength to the housings, even as TVs get thinner and thinner.

In smart-phones, our resins bring high-impact resistance while providing perfect color and gloss. CALIBRE™ polycarbonate resins also are used for optical media, including CD, DVD, HD-DVD, VMD and Blu-Ray.
Industries & Markets

Electrical and Lighting

LED lighting, solar electricity generation, smart meters – the electrical and lighting industries are in the midst of a revolution. Our plastics maximize light output and safety, and stand up to rough use over the product’s lifetime.

CALIBRE™ polycarbonate resins and EMERGE™ advanced resins provide solutions for electrical applications like switches, plugs and meters. CALIBRE polycarbonate resins, EMERGE advanced resins and TYRIL™ SAN resins are used for non-incandescent lighting. And our resins go into smart meters, one of the enabling technologies to achieve reductions in carbon emission and energy usage.

Home Appliances

With years of experience supplying the home appliance marketplace, we understand the challenges the industry faces today – to reduce costs, improve sustainability and meet changing consumer tastes.

With MAGNUM™ ABS resins, TYRIL™ SAN resins, STYRON™ and STYRON A-TECH™ polystyrene resins, and CALIBRE™ polycarbonate resins tailored for the applications of the appliance industry, Styron provides plastics with great performance that allow manufacturers to down-gauge and reduce scrap, saving money, while improving the freedom of design needed to meet consumer needs.

Medical

An increase in minimally invasive surgeries and a shift to more home health-care monitoring have increased the need for light yet durable medical devices.

CALIBRE™ medical grade polycarbonates and EMERGE™ polycarbonate blends from Styron offer medical device manufacturers additional options to meet stringent requirements while ensuring patient safety and keeping costs low – be it for surgical devices, disposable devices or equipment enclosures.
Industries & Markets

Packaging

Protection, convenience and ensuring product quality needed to help consumers trust the packaged final product.

Styron offers STYRON™ polystyrene resins, STYRON A-TECH™ polystyrene resins, CALIBRE™ polycarbonate resins, SCONAPOR™ expandable polystyrene resins and TYRIL™ SAN resins for different packaging needs in transparent, rigid opaque and foamed packaging as well as for bottles.

Paper and Paperboard

Printed items used every day - from playing cards to colorful board based packaging in the shelves, brochures, and magazines - are enhanced by latex coatings from Styron. These coatings provide durability protection as well as decorative features, such as high-gloss finishes, for paper and paperboard.

Supported by our extensive polymer engineering we developed Styrene butadiene latex, Modified styrene butadiene latex, Terpolymer, Styrene acrylate, Thickeners and Synthetic pigments.

Performance Latex

Customers who need performance latex for specialty applications turn to Styron because of our unique latex heritage and renowned industry leadership.

We offer performance latex chemistries each with distinctive benefits, to enhance the performance and mechanical properties of a broad spectrum of applications. These include: Tape saturation, Non-wovens, Cement modification / restoration, Footwear, Ceiling tiles, Adhesives, Running track binders, Textiles binders and coatings.
Industries & Markets

Sheet and Profile Extrusion

Good processability, high consistency, thermal stability – all are important to the plastic sheet and extrusion profile applications. Styron addresses all these concerns with a broad range of resins.

Opaque sheet extruders and producers of edgebands and profiles choose MAGNUM™ ABS resins for their excellent balance of features such as toughness, as well as their extrusion and thermoforming processability.

Clear sheet extruders, specialty and high-performance films manufacturers and floormat producers value CALIBRE™ polycarbonate resins for their perfect combination of toughness, heat resistance and clarity.

Tire and Rubber Goods

As a global leader in the production and distribution of synthetic rubbers, Styron offers a broad portfolio of quality rubber products.

Styron has developed enhanced solution styrene butadiene rubber (SSBR) grades that are used in premium tires, to improve performance properties of wear resistance and wet-grip, while at the same time reducing rolling resistance and fuel consumption.

In addition, our polybutadiene rubber (PBR) is used in impact modification, tires, golf balls and technical goods applications. High quality cold polymerized emulsion styrene butadiene rubber (ESBR) finds its use in standard tires and technical rubber goods.
Our Products
# Emulsion Polymers Overview

## Products

### SB Latex
- Styrene butadiene latex
- Styrene acrylate latex
- Starch-containing emulsion technology

### Synthetic Rubber
- Solution Styrene Butadiene Rubber (SSBR)
- Lithium Polybutadiene Rubber (Li-PBR)
- Emulsion Styrene Butadiene Rubber (ESBR)
- Nickel Polybutadiene Rubber (Ni-PBR)

## Brands

### RotoPrint
- LOMAX™
- Foundations™

### ProPrint
- MaxCoat™
- MLE

### ProStar
- MaxForte™
- ProForte™
- ENVERSA™
- EVEREST™

## End uses

### Paper and board coatings
- Carpet and artificial turf backings
- Performance latex

### Standard and performance tires
- Polymer modification
- Technical goods
Premier Franchise in Emulsion Polymers

SYNLHETIC RUBBER

- Styron is a technology leader in functionalized Solution Styrene Butadiene Rubber (SSBR)

LATEX

- We are the global leader in SB Latex with 25% market share
- Coating is a critical component of paper production, and our customer intimacy generates influence
- Styron is the only supplier with world-class pilot coating facilities in both the U.S. and Europe
Emulsion Polymers – Market Trends

Styron’s offering is aligned to key macro trends that drive future carpet demand

Trends

Sustainability

Higher living standards
Synthetic Rubber Overview

• Leading supplier of SBR and PBR with world-class manufacturing platform in Europe
• Functionalized SSBR growth platform focusing on high performance tires
• Deep and long-standing relationships with all global leading tire producers
• Leader in polymer modification with significant captive use in plastics
Synthetic Rubber Product Differentiation

Styron capabilities capture the spectrum of Synthetic Rubber applications

- Performance Tires
- Polymer modification
- Standard Tires
- Technical Goods

- SSBR Functionalized
- SBR
  - Nd –PBR (b)
  - Li-PBR (a)
  - Co-PBR (b)
- Ni-PBR
- ESBR

(a) Used in Plastic Modification only
(b) Styron owns Licenses and Technologies
## SB Latex – Carpet & Artificial Turf

*Unmatched product offering aligned to meet industry trends*

<table>
<thead>
<tr>
<th>Polymer type</th>
<th>Brands</th>
<th>Applications</th>
</tr>
</thead>
</table>
| SB           | LOMAX™ Technology | Residential broadloom  
               Commercial broadloom |
| Unbranded SB |         | Residential broadloom  
               Commercial broadloom  
               Needle felt  
               Woven  
               Artificial turf |
| VB, VSB      | HPL™ Latex | Residential broadloom  
               Commercial tile  
               Needle felt |
| Acrylic      | Foundations Acrylic Technology | Commercial broadloom |
| Unbranded Acrylic |         | Commercial broadloom |
| VA           | EVEREST™ | Commercial broadloom  
               Carpet tile |
| Foam technology | ENVERSA™ Cushion Technology | Attached cushion  
               Carpet underlay  
               Bath mat |
Styron provides the full range of coating chemistries required by customers

<table>
<thead>
<tr>
<th>Offering</th>
<th>Category</th>
<th>Technology</th>
</tr>
</thead>
<tbody>
<tr>
<td>Binders</td>
<td></td>
<td><strong>Styrene-butadiene</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>Polyvinyl acetate</strong></td>
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<td></td>
<td></td>
<td><strong>All-acrylic</strong></td>
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<td></td>
<td></td>
<td><strong>Vinyl acrylic</strong></td>
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<td></td>
<td></td>
<td><strong>Styrene acrylic</strong></td>
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<td></td>
<td>Thickeners</td>
<td><strong>Hydrophobically modified Alkali-Swellable Emulsions (HASE)</strong></td>
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<td></td>
<td><strong>Hydrophobically modified Ethylene oxide Urethane (HEUR)</strong></td>
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<td><strong>Alkali Swellable Emulsions (ASE)</strong></td>
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<td>Additives</td>
<td>Opacifiers</td>
<td><strong>Solid plastic pigment</strong></td>
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<td><strong>Hollow sphere pigments</strong></td>
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<td>Dispersants</td>
<td><strong>Glacial methacrylic acid based</strong></td>
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<tr>
<td></td>
<td></td>
<td><strong>Glacial acrylic acid based</strong></td>
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<td></td>
<td>Formulated products</td>
<td><strong>Rotogravure sole binder</strong></td>
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<td><strong>CDP formulation</strong></td>
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## Plastics Overview

### Styron Plastics

<table>
<thead>
<tr>
<th>Polystyrene</th>
<th>ABS/SAN</th>
<th>PC / Compounds / Blends</th>
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<tbody>
<tr>
<td><strong>Key Products</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• General Purpose Polystyrene (GPPS)</td>
<td>• Acrylonitrile Butadiene Styrene (ABS)</td>
<td>• Polycarbonate resins (PC)</td>
</tr>
<tr>
<td>• High Impact Polystyrene (HPPS)</td>
<td>• Styrene Acrylonitrile (SAN)</td>
<td>• Compounds and Blends (C&amp;B)</td>
</tr>
<tr>
<td>• Expandable Polystyrene (EPS)</td>
<td></td>
<td>• Polypropylene</td>
</tr>
<tr>
<td><strong>Brands</strong></td>
<td></td>
<td>• Ignition resistant Polystyrene (IRPS)</td>
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<tr>
<td>STYRON™</td>
<td>MAGNUM™</td>
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<td><strong>Markets</strong></td>
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<td>Appliances</td>
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<td>Building and Construction</td>
<td>Automotive and RV</td>
<td>Automotive</td>
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<td>Consumer Goods</td>
<td>Furniture</td>
<td>Consumer Electronics</td>
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<td>Electrical and Lighting</td>
<td>Consumer Goods</td>
<td></td>
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<tr>
<td>Packaging</td>
<td></td>
<td>Medical</td>
</tr>
</tbody>
</table>

- **Applications:** Medical
- **Automotive:**
- **Consumer Goods:**
- **Electrical and Lighting:**
- **Packaging:**
Broad Plastics Offering Anchored by a Premier Polystyrene Franchise

- Supplying numerous industries in all geographic regions
- Top 3 supplier globally* in Polystyrene, with 8.2% global market share
- Only global supplier with wide range of PS, ABS/SAN, and PC blends
- Styron is well positioned with:
  - Differentiated ABS technology
  - Assets strategically positioned in growth regions
  - Recognized leadership in application development
  - Enduring customer partnerships

* Includes Styron share of Americas Styrenics joint venture
Unmatched Global Development and Application Platform for Plastics
Plastics – Market Trends

*Styron’s portfolio is aligned with global macro trends backed by solid fundamentals*

**Trends**

- Energy Efficiency
- Increased Living Standards
- Waste Reduction/Sustainability
- Aesthetics/Differentiation
- Increasing Raw Material Costs
- Convenience
- Home Entertainment
Finding Solutions for Our Customers

• At Styron, we strive to bridge the gap between our customer’s ideas and reality – to create shared value for the marketplace and for Styron.

• We have a long history of making the impossible possible when it comes to materials challenges. And we’re just getting started.

Styron. Powering Ideas.