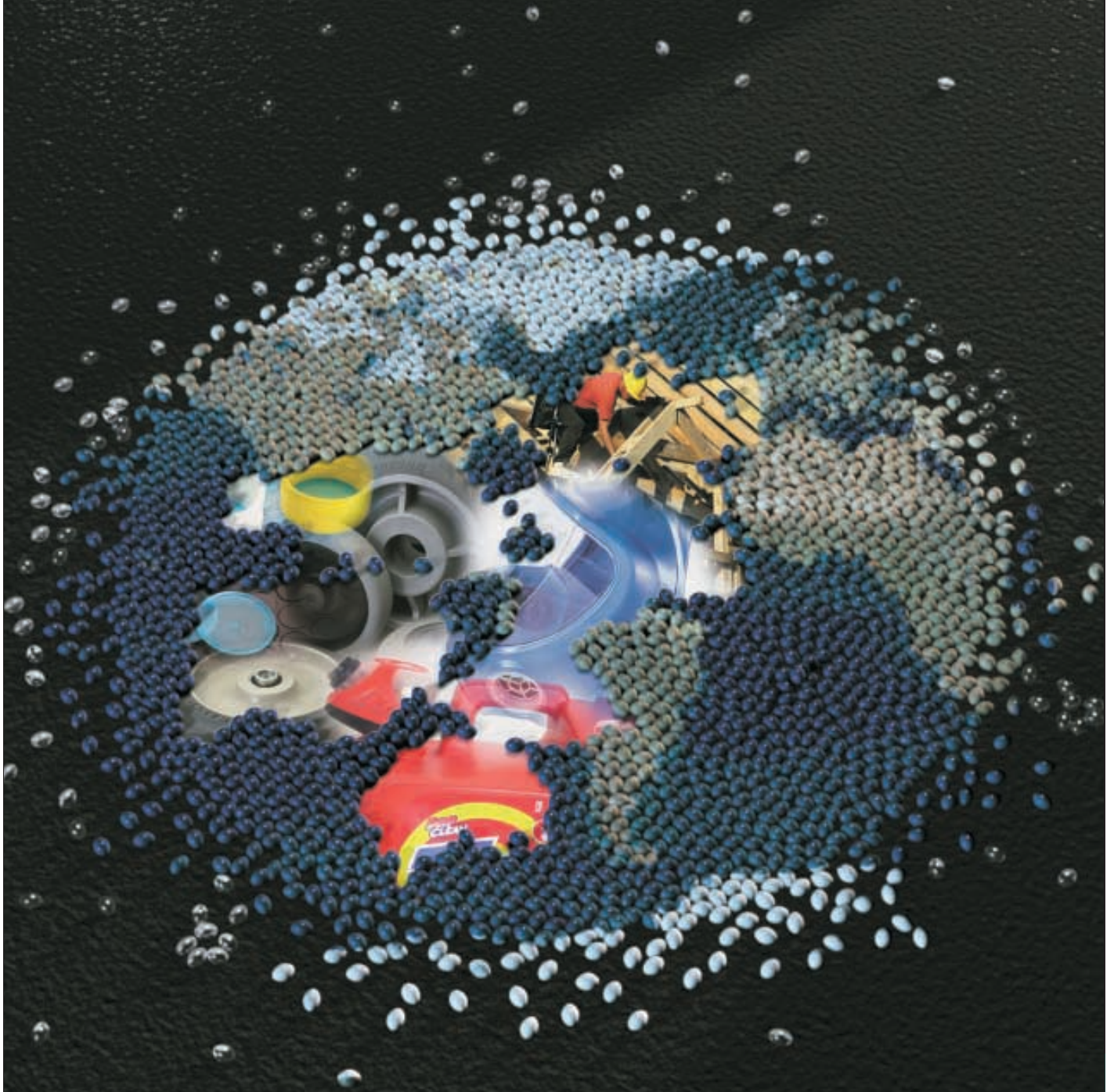




# TEKNOR APEX

THERMOPLASTIC ELASTOMER DIVISION



Shaping a New World of Opportunities




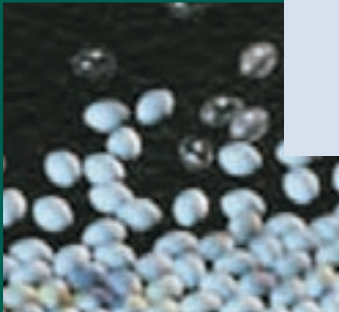
## **THERMOPLASTIC ELASTOMER COMPOUNDS**

### **A profile of leadership.**

The Thermoplastic Elastomer Division of Teknor Apex has built its worldwide TPE leadership on more than 75 years experience with flexible and elastomeric polymers.

Headquartered in Pawtucket, Rhode Island, we also operate thermoplastic elastomer facilities in St. Albans, Vermont; Brownsville, Tennessee; and Henderson, Kentucky.

Additionally, we are able to offer value-added resources because of our ability to work closely with other Teknor Apex divisions including: Teknor Color Company, a leading supplier of color concentrates; Vinyl Division, producer of flexible PVC compounds and vinyl TPEs for all major markets; and Specialty Compounding Division, manufacturer of compounds based on a wide variety of polymers.



**TEKNOR APEX**





# TEKNOR APEX

## THERMOPLASTIC ELASTOMER DIVISION...

...proud to offer you the world's widest range of thermoplastic elastomer (TPE) compounds available from an independent compounder.

Within each of our TPE product families, Teknor Apex provides the widest available range of elastomeric polymer formulations...literally thousands of custom-tailored and standard opportunities for successful applications in diverse marketplaces including:

- Appliances
- Caps & Closures
- Housewares
- Sporting Goods
- Wire & Cable
- Automotive
- Electrical & Electronics
- Medical
- Toys
- Writing Instruments
- Building & Construction
- Footwear & Foot Care
- Oral Care
- Wheels & Casters
- Numerous other Consumer and Industrial Applications

Many of our TPE products also meet or exceed applicable requirements of Underwriters Laboratories (UL); the U.S. Food and Drug Administration (FDA); as well as specifications set out by other governmental, regulatory, industrial agencies plus automotive OEMs and military end-users.



# THERMOPLASTIC ELASTOMER DIVISION

## Diverse. Unique. World-Class.

Our thermoplastic elastomers are among the fastest-growing plastics materials...and for many great reasons.

- TPEs are a unique class of engineering materials combining the look, feel and elasticity of conventional thermoset rubber with the processing efficiency of plastics.
- Because TPEs are thermoplastics, their melt-processability makes them very suitable for high-volume injection molding and extrusion. They can also be reclaimed and recycled.
- As elastomers, TPEs exhibit true elasticity. Our range of grades includes rubberlike properties and offer a wide range of durometers, low compression set, and high elongation.

### Monprene®

#### Description:

Styrenic block copolymers incorporating hydrogenated isoprene rubber.

#### Applications include:

- High toughness grades for applications such as wheels, casters and swim fins.
- Super-soft formulations for medical and foot-care uses.
- Translucent/dry-to-the-touch compounds.
- Water-clear/high-tack/high resilience materials.
- Filled general purpose grades.

#### Benefits:

Diversity of grades. Ideal for over-molding when design needs include an elastomeric material used in conjunction with tough, rigid, olefinic thermoplastics. Solid but cushioning feel. Durable but soft touch.

### Uniprene®

#### Description:

Thermoplastic vulcanizates (TPVs) — high performance compounds containing a highly crosslinked elastomeric phase (typically EPDM rubber) finely dispersed in a thermoplastic matrix (typically polypropylene).

#### Applications include:

Automotive and appliance components, wire and cable and many other consumer and industrial products.

#### Benefits:

The crosslinked phase provides greater elasticity and thermal stability than many other TPEs. The matrix renders the compounds melt-processable on standard plastics equipment. No pre-drying is required prior to processing. A light natural hue makes it possible to achieve bright colors with modest loadings of color concentrate. Performs much like a cured EPDM rubber but can be processed with the ease and speed of thermoplastic olefins. 7010 Series certified in accordance with NSF 061 standard for potable water.

### Elexar®

#### Description:

Styrene (S-EB-S) block copolymer compounds.

#### Applications include:

Wire and cable, power, communication, and data cable as well as injection molded plugs and connectors.

#### Benefits:

Superior electrical properties combined with flexibility and toughness. Can be processed with the speed and economy of a thermoplastic.

### Tekron®

#### Description:

Styrene block copolymer compounds. Composed of PS end blocks (S) and poly (ethylene-butylene) mid-blocks (EB).

#### Applications include:

Diverse automotive and medical applications as well as general-purpose molding and extrusion. Special scuff-and-mar resistant formulations are available to cut the cost of automotive airbag covers by eliminating the need for painting.

#### Benefits:

Versatility featuring formulations that cover an exceptionally wide range of hardness, flexural modulus and elongation. Flexible and tough yet can be processed with the ease of a thermoplastic. Enables design versatility, product simplification, lower capital investment and lower operating costs. EB mid-blocks provide excellent heat and weather aging properties.

### Telcar®

#### Description:

Polyolefin/rubber blend thermoplastic olefins (TPOs).

#### Applications include:

Automotive ducts, hoses, knobs, strut covers and airbags, weatherstripping.

#### Benefits:

Rubberlike performance and appearance, tear strength, and resistance to heat aging and ozone. Performance characteristics of thermoset rubber with the processing ease of thermoplastics.

### Tekbond™

#### Description:

Compounds based on styrene-butylene-ethylene-styrene (SEBS)

#### Applications include:

"Soft-touch" grips and handles, seals and other components for markets including automotive and appliances.

#### Benefits:

Ensures strong bonds to polycarbonate (PC), ABS, PC/ABS alloys, acrylic, cellulose propionate, Nylon 6,6, and PCT polyester. Can be over-molded, without prior surface treatment, directly onto a wide range of substrates including many neat and glass-filled engineered part substrates. Enables production of hybrid parts with unique performance and marketing appeal, often at substantially reduced finished cost. Available in a wide hardness range and virtually any color, thereby eliminating the need to inventory multiple over-molding compounds for multi-component applications.



# TEKNOR APEX

THERMOPLASTIC ELASTOMER DIVISION

505 Central Avenue  
Pawtucket, RI 02861  
Toll-Free: 1.800.554.9892  
Phone: 401.725.8000  
Fax: 401.728.5680  
E-mail: TPE@teknorapex.com

[www.teknorapex.com](http://www.teknorapex.com)

**Toll Free**  
**1.866.GET.TPEs**  
(1.866.438.8737)

## Who Is Teknor Apex?

Teknor Apex began in 1924 as a tire distributor and retreader. It now consists of eight divisions employing over two thousand people in strategic locations worldwide. Besides the Thermoplastic Elastomer Division, our other divisions are:

**Vinyl Division** – custom compounder of flexible and semi-rigid PVC compounds.

**Teknor Color Company** – supplier of color concentrates to the plastics industry.

**Chemical Division** – captive producer of plasticizers and toll compounder of chemicals.

**Rubber Division** – supplier of custom rubber mixing services and tread rubber products for the retreading industry.

**Lawn & Garden Division** – one of the nation's largest manufacturers of garden hose.

**Commercial Products** – manufacturer of anti-fatigue and safety mats along with cutting boards for commercial and industrial applications.

**Specialty Compounding Division** – provides leading edge processor of specialty compounds and engineering plastics.



**ISO 9001 CERTIFIED**

ISO-9001 and QS-9001 Registered, Pawtucket, R.I.

ISO-9002 Qualified Systems Certified, Pawtucket, R.I.; Fountain Inn, SC;  
Brownsville, TN; Industry, CA; Hebronville, MA.

The information contained herein is believed to be reliable.  
However, all recommendations or suggestions are made without guarantee,  
as conditions and methods of commercial use are beyond our control.