

EASTMAN



Eastman plastics

for a world of applications

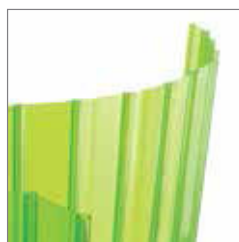
The results of **insight™**

About Eastman

Eastman is a global specialty chemical company that produces a broad range of advanced materials, additives and functional products, specialty chemicals, and fibers that are found in products people use every day. As a world leader in the diverse markets it serves, Eastman is focused on delivering innovative and technology-based solutions while maintaining its commitment to safety and sustainability. Its market-driven approaches take advantage of world-class technology platforms and leading positions in attractive end markets such as transportation, building and construction, and consumables. Eastman focuses on creating consistent, superior value for all stakeholders. As a globally diverse company, Eastman serves customers in approximately 100 countries and is headquartered in Kingsport, Tennessee, U.S.A.

Eastman specialty plastics

Eastman Chemical Company sells its resins in pellet form. Molders and extruders around the world process Eastman resins into literally hundreds of end uses, only a few of which are found in this brochure. No matter the need, Eastman is committed to finding solutions and resins with the right combination of properties and economics to meet each customer's fitness-for-use criteria.



Contents

Plastics for injection molding and blow molding	4
The Glass Polymer™ family of cosmetic materials	4
Eastman Aspira™ family of resins	5
Eastar™ copolyesters	6
Eastman Tritan™ copolyester	8
DuraStar™ polymers.	10
Tenite™ cellulosics.	11
Plastics for sheet and film	12
Eastman Spectar™ copolyester.	12
Eastman Embrace™ family of resins	14
Eastman Tritan™ copolyester	15
Ecdel™ elastomers.	16
Eastman Cadence™ resins for calendered films.	17
Eastman Provista™ copolymer	18
Eastman Cerfis™ technology	19
Let Eastman help	20

Plastics for injection molding and blow molding

The Glass Polymer™ family of cosmetic materials

The Glass Polymer™ family of cosmetic materials has a broad portfolio. For product info, refer to Eastar and Tenite cellulosics sections.

No other material delivers the design freedom and processing flexibility to turn ordinary containers into extraordinary shelf appeal. That's why many of the world's leading brands and top manufacturers prefer The Glass Polymer. From mass market to prestige products, only The Glass Polymer offers clarity and chemical resistance. This powerful combination gives you the most versatility for the widest range of products and powerful processes.

Key characteristics

- Luxurious look and feel
- Design freedom
- Sustainable solutions
- Superior chemical resistance
- Ease of secondary processes: color, decoration, hot stamping
- Tough and shatter resistant
- Ability to mold thick parts
- Processing advantages—reduce overall cycle time with excellent flow rates and mold-fill capability
- Functional benefits such as snap-fit, clip-on caps, and closures
- High gloss
- Not manufactured with bisphenol-A (BPA)
- Not manufactured with halogens, sulfur, nitrogen, lead, mercury, cadmium, or hexavalent chromium

Major applications

- Cosmetics packaging
 - Custom containers
 - Skin care jars
 - Fragrance caps
 - Color cosmetics



Eastman Aspira™ family of resins

Eastman Aspira™ family of resins is designed specifically for extrusion blow molded packaging. The family of resins enables creation of appealing, large handleware containers with improved manufacturing economics and sustainability. They combine a unique collection of attributes—clarity, gloss, design freedom, processability, toughness, and recyclability—enabling the development of ergonomic packaging. Aspira One brings the value of recyclable, durable packaging with resin ID code 1 (RIC 1), while Aspira EB062 provides both impact strength and chemical resistance, creating very durable containers.

Key characteristics

- Design freedom
- Compatible with any EBM platform
- Eye-catching clarity and gloss
- Toughness of Aspira EB062
- Recyclability of Aspira One

Major applications

- Beverage packaging
- Household packaging
- Food packaging
- Clear handleware
- Large liquid containers
- Glass bottle alternatives

Aspira copolyester EB062

Eastman Aspira™ copolyester EB062 is a resin specifically developed for extrusion blown bottles. Extremely high melt strength makes the resin an excellent choice when manufacturing large bottles.

Aspira One polymer

Eastman Aspira™ One integrates recyclability with the demands of EBM efficiency, performance requirements, and design flexibility. Sustainability, beauty, and performance in one package.



Eastar™ copolyesters

Eastar™ copolyesters offer a unique combination of properties —aesthetics, chemical resistance, performance reliability, and economics—that give manufacturers what they need to successfully compete in today's marketplace.

Key characteristics

- Exceptional clarity
- Good impact strength and toughness
- Outstanding chemical resistance
- High gloss
- Excellent colorability and ease of decoration
- Complies with U.S. Food and Drug Administration (FDA) and Japanese (JHOSPA) requirements for use in specified food contact applications. Information is available on request.
- GREENGUARD Indoor Air Quality Certified®
- Not manufactured with bisphenol-A (BPA)
- Not manufactured with plasticizers
- Not manufactured with halogens, sulfur, nitrogen, lead, mercury, cadmium, or hexavalent chromium

Major applications

- Food packaging
- Cosmetics packaging
- Personal care packaging
- Industrial packaging
- Pen caps
- Fragrance containers
- Toothbrushes
- Oral hygiene
- Cosmetics jars and caps
- Medical device components
- Suction and drainage
- Labware
- Beverage containers
- Stock bottles
- Personal care bottles



Eastar copolyesters GN series

Eastar copolyesters GN series is clear and amorphous with no crystallization during molding, extrusion, thermoforming, or heat bending. It is moldable up to 1 in. (about 3 cm) thickness without crystallizing. Very versatile, it can be injection molded, extruded, and extrusion blow molded. Information on recyclability and regulatory compliance, including U.S. FDA food contact regulations, is available on request.

Eastar copolyesters BR series

Specifically designed for the global toothbrush market, Eastar copolyesters BR series has excellent clarity and fast cycle time, even with thick handles. It shows outstanding chemical resistance to aggressive toothpaste and mouthwash ingredients. Regulatory compliance information, including U.S. FDA food contact compliance, is available on request.

Eastar copolyesters AN series

Eastar copolyesters AN series is an outstanding material developed for cosmetics packaging. It has brilliant clarity, high gloss, and excellent chemical resistance to perfumes and beauty creams. With fast cycle times, it is very easy to injection mold. It can also be stretch blow molded. Eastar AN series is a part of The Glass Polymer™ family of cosmetic materials.

Eastar copolyesters CN series

Eastar copolyesters CN series was designed and engineered specifically for cosmetics packaging applications. It has enhanced color, clarity, and improved gate aesthetics to mold thick parts. Other outstanding features are excellent chemical resistance, high gloss, and improvements in processing such as faster drying times, faster cycle times, and lower scrap rates. It is ideally suited for two-shot molding techniques due to its lower processing temperatures, very low crystallization rate, and flow characteristics. Eastar CN series is the best copolyester for premium cosmetics packaging and is part of The Glass Polymer™ family of cosmetic materials.

Eastar copolyesters EB series

Eastar copolyesters EB series is specifically developed for cosmetics packaging applications that balance easy processing with a mix of product attributes including clarity, chemical and impact resistance, and design flexibility.

Eastar copolyesters DN series

A brilliantly clear polymer, Eastar copolyesters DN series has excellent impact strength, high gloss, chemical resistance, and low shrinkage rates. Eastar DN series is part of The Glass Polymer™ family of cosmetic materials. Regulatory compliance information, including FDA food contact compliance, is available on request.

Eastar copolyesters MN series

Eastar copolyesters MN series is specifically developed for medical device applications where aesthetics such as high clarity, coupled with high toughness and chemical resistance, are desirable. Results of FDA/ISO 10993 and USP Class VI Biological Evaluation after gamma and EtO sterilization are available.



Eastman Tritan™ copolyester

Eastman Tritan™ copolyester, a new-generation copolyester, is a significant breakthrough that helps differentiate clear or colored products through design and performance. Tritan not only retains the versatility of copolyesters, but it also offers higher temperature resistance and higher impact resistance. Tritan can open a whole new world of design freedom and product durability for brand owners and manufacturers. Information on compliance with U.S., EU, and Japanese food contact requirements is available on request.

Key characteristics

- Tremendous toughness
- Good heat resistance
- Not manufactured with BPA
- Endocrine activity (EA) free
- Excellent clarity and gloss
- Excellent hydrolytic stability
- Outstanding chemical resistance
- Durability extends product life cycle
- Wide thermoforming window
- Ease of processing
- GREENGUARD Indoor Air Quality Certified®

Major applications

- Small appliance parts
- Sporting goods
- Reusable water bottles
- Cosmetics packaging
- Commercial housewares
- Consumer housewares
- Food storage containers
- Personal care packaging
- Baby bottles
- Baby cups
- Pacifiers
- Large-volume water containers
- Medical devices



Tritan copolyester TX series

Eastman Tritan copolyester TX series is a family of amorphous copolyesters with excellent appearance and clarity, excellent toughness, hydrolytic stability, and heat and chemical resistance. The TX series can also be molded into various applications without incorporating high levels of residual stress. TX is suitable for repeated use in food contact articles under U.S. FDA Food Contact Notification and is certified to NSF/ANSI Standard 51 for Food Equipment Materials.

Tritan copolyester LX series

Developed for the cosmetics, fragrance, and personal care markets, Eastman Tritan copolyester LX series can easily be converted into articles for application in consumer and personal care markets by injection molding, extrusion blow molding, and injection blow molding. It has excellent toughness, hydrolytic stability, and heat and chemical resistance. Tritan LX series is a part of The Glass Polymer™ family of cosmetic materials.

Tritan copolyester EX series

Eastman Tritan copolyester EX series was specifically developed for the infant care market using Eastman's knowledge of copolyester chemistry. It can be converted into parts using injection, injection blow, injection stretch blow, reheat blow, and extrusion blow molding techniques. It is also suitable for repeated use in food contact articles under U.S. FDA Food Contact Notification.

Tritan copolyester WX series

Eastman Tritan copolyester WX series is a resin specifically developed for larger, extrusion blow molded bottles. With extremely high melt strength, this resin is an excellent choice when manufacturing large bottles. Outstanding features are excellent toughness, hydrolytic stability, and heat and chemical resistance. It is suitable for repeated use in food contact articles under U.S. FDA Food Contact Notification.

Tritan copolyester MX series

Eastman Tritan copolyester MX series was specifically developed for medical device applications that require chemical resistance to solvents, high clarity, and color stability after sterilization (gamma and e-beam). The outstanding features of the MX series are toughness and good flow for easy processing. The material meets selected biocompatibility requirements under FDA/ISO 10993 and USP Class VI classification.

Tritan copolyester VX series

Eastman Tritan copolyester VX series is a family of amorphous copolyesters with excellent clarity and optical properties. It was developed to provide the face protection and ophthalmic markets with an ideal balance of properties for faceshields, molded protection parts, and ophthalmic lenses and frames. It can be processed using a variety of thermoplastic processing techniques and equipment, including injection molding and extrusion processes.



DuraStar™ polymers

DuraStar™ polymers have proven to be incredibly versatile injection molding resins and are used in a wide range of markets including appliances, consumer goods, and toys. Molders have come to appreciate DuraStar polymers for their outstanding chemical resistance, excellent clarity, and exceptional impact properties.

Key characteristics

- Outstanding impact resistance
- Exceptional clarity
- Good chemical resistance
- High gloss
- Not manufactured with BPA
- Not manufactured with plasticizers

Major applications

- Appliance parts
- Sporting goods
- Store displays
- Floor care
- Furniture trim
- Toys



DuraStar polymers DS series

In addition to excellent appearance and clarity, the most outstanding features of these polymers are chemical resistance and excellent processing characteristics. Exposure to aromatic oils often causes crazing or actual fracture of many polymer resins. However, DuraStar polymers DS series maintains its physical properties when exposed to these oils, and its appearance is virtually unchanged. It is easy to process, flows readily, fills intricate molds, and is well suited for thick-wall applications.

DuraStar polymers MN series

DuraStar polymers MN series has excellent appearance and is nearly water-clear. Its most outstanding features are toughness, chemical resistance, and excellent processing characteristics. DuraStar MN series has very good toughness as shown by Izod impact resistance. It is easy to process, flows readily, and fills intricate molds. This product does not contain a mold release.



Tenite™ cellulosics

Tenite™ cellulosics are wood cellulose-based polymers that have been used for more than 50 years in a variety of extruded and injection molded applications. Cellulosic plastic is generally selected for its excellent balance of properties: toughness, hardness, strength, surface gloss, clarity, and warm feel. This unique material is manufactured using natural, renewable, softwood materials with significantly less petroleum-derived raw materials than traditional plastics. The mechanical properties of Tenite cellulosics vary with the plasticizer levels. Lower plasticizer content yields a harder surface, higher heat resistance, greater rigidity, higher tensile strength, and better dimensional stability. Higher plasticizer content increases impact strength.

Key characteristics

- Derived from 100% renewable softwood material
- Contains more than 40% renewable content
- Tough and durable—designed to last
- Feels like wood—warm to touch
- Sounds like wood—dull sound
- Exhibits exceptional clarity
- Excellent chemical resistance
- Molds and extrudes easily
- Can be scented
- Available in a variety of formulas, plasticizer levels, and additives

Major applications

- Ophthalmic sheets
- Automotive and furniture trim
- Displays
- Cosmetics containers
- Film and tubing
- Optical safety frames

Tenite cellulose acetate (CA) series

Tenite™ cellulose acetate is selected in applications where it may offer a chemical resistance advantage. Certain formulas and flows also offer greater surface hardness and higher tensile strength than either butyrate or propionate.

Tenite cellulose acetate butyrate (CAB) series

Tenite™ cellulose acetate butyrate is chosen over propionate when its advantages in weatherability and dimensional stability are desired or when soft flows are needed.

Tenite cellulose acetate propionate (CAP) series

Tenite™ cellulose acetate propionate is selected over butyrate when properties of greater hardness, tensile strength, and stiffness are required.



Plastics for sheet and film

Eastman Spectar™ copolyester

Eastman Spectar™ copolyester can be vacuum formed at lower temperatures than other plastics without predrying the sheet. Its edges can be polished by using commercial edge-finishing equipment, sanding, solvents, flame polishing, or buffing. It forms clear, strong bonds with commercially available cements and solvents. Surface scratches or scuff marks can be removed using a common heat gun. Outstanding toughness and impact resistance allow downgauging and reduce breakage costs, yet it can be extruded into sheets as thick as 12 mm (½ in.). Elaborate displays are possible through high-definition thermoformability, and components can be easily welded, riveted, solvent bonded, and routed.

Key characteristics

- Crystal clear
- Excellent thermoforming characteristics
- Flexibility for innovative designs
- Good chemical resistance
- Good flammability rating (fixed installations)
- Odorless
- Outstanding impact resistance
- Outstanding toughness allows downgauging
- Resists chipping and cracking
- Versatile; easy to fabricate
- GREENGUARD Indoor Air Quality Certified®
- MBDC Cradle to Cradle™ silver certification
- Not manufactured with BPA

Major applications

- Decorative light-transmitting panels
- Heavy-gauge sheet displays
- Interior finish applications
- Architectural applications
- Indoor signs
- Point-of-purchase displays
- Store fixtures
- Vending machine panels



Spectar copolyester 14471

Eastman Spectar™ copolyester gives you the strength to create and worry less about breakage. Its toughness allows fabricators to use thinner-gauge sheet than with other common materials, resulting in lower material costs. Eastman Spectar™ copolyester can be finished easily. Its edges can be polished by using commercial edge-finishing equipment, sanding, solvents, flame polishing, or buffing. It forms clear, strong bonds with commercially available cements and solvents.

Spectar FR1000 copolyester

Eastman Spectar FR1000 copolyester concentrate can be added to Spectar, and other Eastman copolyesters to produce extruded sheet and profiles which meet ASTM E-84 requirements for a Class A flammability rating for interior finish applications.

Spectar Frost copolyester

Eastman Spectar Frost™ copolyester (PETG) has a matte finish with outstanding durability and toughness that enables displays and fixtures to use thinner-gauge sheet than other common materials. Eastman Spectar Frost retains its matte finish when thermoformed, hot bent, and after other fabrication processes.

Spectar UV copolyester

Eastman Spectar UV™ copolyester (PETG) is a versatile copolyester that extrudes into plastic sheet that is sparkling clear, tough, chemically resistant, odor free, easy to work with, and affordable. It is easy to fabricate, allowing greater design freedom. It can be laser cut, routed, welded, drilled, die punched, bent hot or cold, or joined by screws, rivets, or bolts.



Eastman Embrace™ family of resins

Eastman Embrace family of resins is a leader in the shrink film market for beverage packaging. These resins provide toughness, clarity, and printability, enabling brand owners to enhance brand experiences through superb aesthetics for greater shelf appeal. Embrace offers the flexibility to design bold, glossy 360-degree label graphics wrapped around high contoured or complex containers. The differentiation of Embrace helps products promote brand image, attract consumers' attention, increase sales, and encourage consumer brand loyalty.

Key characteristics

- Excellent printability
- Greater than 75% ultimate shrinkage
- Crystal clarity and gloss
- Shrinks to fit contour bottles
- Good chemical resistance
- UV protection with Embrace HY
- Eye-catching 360° graphic capability

Major applications

- Shrink labels
- Labels to fit high contour containers
- Beverage packaging
- Food packaging
- Personal packaging
- Household packaging

Embrace LV copolyester

Eastman Embrace LV™ resins for shrink labels, deliver a low-shrink force solution for thin-walled containers featuring sparkling clarity and high gloss, excellent printability, and optical machine direction (MD) growth for less film usage. Embrace LV is the versatile one-resin solution for shrink body labels.

Embrace HY copolyester

Eastman Embrace High Yield copolyester is a concentrate that is combined with Embrace LV copolyester to create a naturally white film with UV and visible light-blocking capability, and optimum MD growth that is approximately 30% less dense than other copolyesters, enabling more film per weight. Embrace HY has an ultimate shrinkage of up to 70% and the ability to shrink around highly contoured or complex containers for 360° label graphics. Embrace HY also has a soft touch for an organic feel and slip resistance and is a noise-free film for squeezable packaging.

Embrace copolyester

Eastman Embrace copolyester is a high shrink-rate solution that offers water-like clarity to showcase 360° label graphics for maximum shelf appeal. It offers excellent front or reverse printability, as well as an ultimate shrinkage greater than 75% on highly contoured or complex containers.

RAS technology

RAS ("roll-applied shrink") is a roll-applied labeling process designed for high-speed labeling lines that use traditional hot-melt label application equipment, giving manufacturers the versatility to work with a broad range of seaming technologies, including hot melt, solvent, and emerging technologies. RAS technology is interchangeable, offering flexibility to apply nonshrink labels in one campaign. This technology enables more billboard and more contoured shapes with 360° graphics, while achieving up to 55% MD film shrinkage.



Eastman Tritan™ copolyester

Eastman Tritan™ copolyester is a new-generation copolyester that helps differentiate clear or color products through design and performance. Tritan retains the versatility of copolyesters while opening up a whole new world of design freedom.

Key characteristics

- Does not contain bisphenol-A (BPA)
- Does not contain plasticizers
- Excellent clarity
- No predrying film prior to thermoforming
- Outstanding chemical resistance
- Tremendous toughness
- Temperature resistance
- Enduring sustainability
- Suitable for most forms of sterilization
- Wide thermoforming window
- Ease of fabrication
- High impact
- Transparent
- Ease of processing
- Fast cycle times
- Fast drying times
- Good flowability
- Good hydrolytic stability

Major applications

- Device packaging
- Extruded medical films and sheeting
- Medical articles from sheet
- Rigid medical packaging
- Sterile medical packaging
- Building and construction
- Displays
- Consumer & durable goods
- Electronics
- Signs
- Transportation and outdoor vehicles
- Graphic arts
- Leisure and safety
- IMD/IML
- Ophthalmics
- Sunwear frames & lenses

Tritan copolyester FX series

Films manufactured from this new-generation copolyester can be thermoformed without predrying and with a wide processing window that allows for product designs that reflect intricate detail. Eastman Tritan copolyester FX series is suitable for repeated use in food contact articles under U.S. FDA Food Contact Notification.

Tritan copolyester GX series

Eastman Tritan copolyester GX series exhibits strength, clarity, and temperature resistance, making it ideal for demanding applications such as signs. Extruded sheet is manufactured with Tritan GX series resin in a thickness range from 0.080 to 0.250 in.

Tritan copolyester VX series

Eastman Tritan copolyester VX series is an amorphous copolyester with excellent clarity and optical properties. Its features and benefits include excellent toughness and resistance to hydrolysis, chemical attack, and fatigue. Tritan VX series provides an ideal balance of properties and can be processed using a variety of thermoplastic processing techniques and equipment.

Tritan copolyester MP series

Eastman Tritan MP100 is an amorphous copolyester that combines excellent clarity and toughness with outstanding heat and chemical resistance. Film and sheet manufactured from this new-generation copolyester can be thermoformed with a wide processing window that allows for product designs that reflect intricate detail. Eastman Tritan MP100 copolyester is suitable for use with most forms of sterilization including radiation and ethylene oxide. It is NOT suitable for autoclave/steam sterilization. Eastman Tritan MP100 copolyester has been formulated for use in medical film, sheet, and packaging applications.



Ecdel™ elastomers

Ecdel™ elastomers can be injection molded, extrusion blow molded, extruded into film or sheet, and may be fabricated into bags. Ecdel elastomers are ideal for applications in flexible medical or pharmaceutical packaging and tubing where low extractables, toughness, flex crack resistance, high creep resistance, and utility in harsh environments are required. Ecdel elastomers impart strength and durability and resist puncturing. They remain remarkably clear and free of blush or haze that can occur in high-temperature autoclaving for medical applications.

Key characteristics

- High flexibility and toughness without the use of modifiers
- Not manufactured with BPA
- Not manufactured with orthophthalate plasticizers
- Very high clarity without blushing
- Excellent puncture resistance
- Low-temperature strength
- Good chemical resistance
- Low extractables
- Outstanding flex crack and creep resistance
- Temperature resistance (autoclavable, dimensionally stable, low shrink)
- Enables excellent sealing in multilayer films
- Meets selected USP Class VI/ISO 10993 testing requirements
- Solvent, RF, laser, and impulse bondable

Ecdel elastomers 9965 and 9966

Meets ISO 10993 and/or USP Class VI biocompatibility requirement.
Ecdel™ elastomers are medical grade copolyester ethers (COPE) that offer the clarity, toughness, and chemical resistance needed in a variety of flexible packaging including medical applications. Ecdel 9965 and 9966 may be injection molded or extruded.

Ecdel elastomer 9967

Meets ISO 10993 and/or USP Class VI biocompatibility requirement.
Ecdel™ elastomers are medical grade copolyester ethers (COPE) that offer the clarity, toughness, and chemical resistance needed in a variety of flexible packaging including medical applications. Ecdel 9967 may be injection molded or extruded and extrusion blow molded or processed into tubing.

Major applications

- Bags
- Flexible medical packaging
- IV containers
- Pharmaceutical packaging
- Tubing
- Films
- Heavy-gauge sheets



Eastman Cadence™ resins for calendered films (GS series)

Eastman Cadence™ resins are Eastman's original copolyesters for film calendering. Calendered films made of Cadence resins are noncrystallizing and halogen free. They offer wide calendering and thermoforming windows and have good low-temperature toughness. They are cooperative in secondary operations such as solvent bonding, lamination, decoration, cold forming, punching/cutting, and embossment.

Key characteristics

- Halogen free
- Noncrystallizing
- Wide calendering & thermoforming windows
- Good low-temperature toughness

Major applications

- Appliance films
- Architectural laminates
- Automotive films
- Decorative laminates
- Furniture/furniture trim
- Transaction cards

Cadence copolyester G Series

Eastman Cadence G series is an amorphous copolyester for film calendering. Calendered films made of Eastman Cadence™ copolyesters are noncrystallizing, are halogen free, offer wide calendering and thermoforming windows, and have good low-temperature toughness.



Eastman Provista™ copolymer

Eastman Provista™ copolymer is a family of resins specifically developed for extrusion into profiles where aesthetics like high clarity and gloss, coupled with design flexibility, drive demand. Compared to commonly used materials, Provista copolymer can often run on standard processing equipment at increased speeds. Extremely high melt strength makes the resin an excellent choice when extruding profiles into complicated shapes.

Key characteristics

- Sparkling clarity and high gloss
- Ease of processing
- Excellent chemical resistance
- Complies with FDA and JHOSPA requirements for use in specified food contact applications. Information is available on request.
- Toughness with flexibility

Major applications

- Pricing channels
- Rails
- Tubing
- Point-of-purchase displays
- IC tubes

Provista copolymer

Eastman Provista™ copolymer is a resin specifically developed for extrusion into profiles where aesthetics like high clarity and gloss, coupled with design flexibility, drive demand.

Provista copolymer MP series

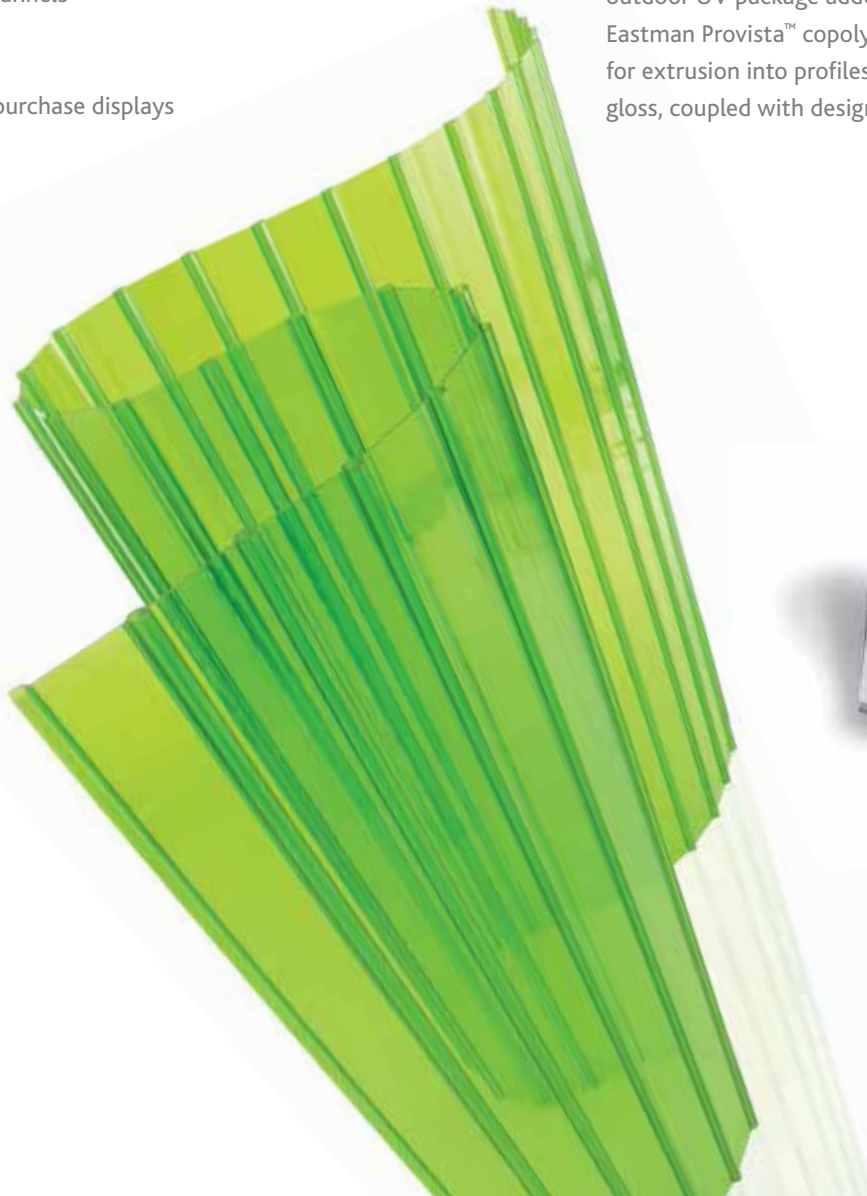
Eastman Provista copolymer MP series is developed for extrusion into profiles where aesthetics such as high clarity and gloss, coupled with design flexibility, drive demand. Extremely high melt strength makes the resin an excellent choice when extruding profiles into complicated shapes.

Provista copolymer ST

Eastman Provista copolymer ST is a resin specifically developed for profile extrusion where high clarity and gloss, toughness, and processability are critical.

Provista copolymer UV series

Eastman Provista UV series is a copolymer with an indoor/outdoor UV package added to prevent yellowing caused by light. Eastman Provista™ copolymer is a resin specifically developed for extrusion into profiles where aesthetics like high clarity and gloss, coupled with design flexibility, drive demand



Eastman Cerfis™ technology

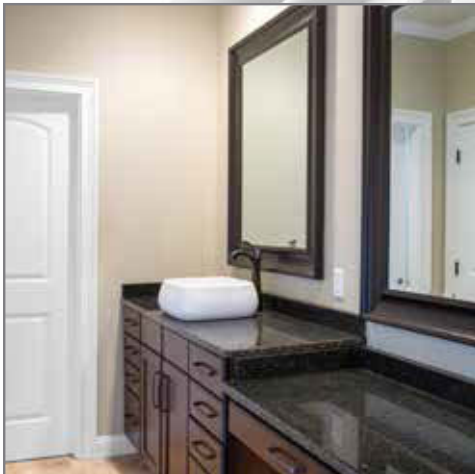
Eastman Cerfis™ technology is a revolutionary coating system that gives manufacturers the power to “start with the finish” to produce unmatched surface and substrate solutions. Cerfis technology combines process, equipment, and chemistry to create coated products with unmatched precision, consistent quality, and durable beauty. By offering products made with Cerfis technology, you can create differentiated products with high-performance attributes—to add quality and functionality to existing product lines or to open up entirely new markets.

Key characteristics

- Geometric precision and consistency
- Enhanced durability
- Dimensional stability
- Resistance to scratching, marring, and denting
- Resistance to moisture (selected coatings)
- Reduced warpage and twisting
- Nonchipping, paintable finish
- Supports sustainability
- GREENGUARD® Certified resins with no VOCs

Major applications

- Interior moulding and trim



Let Eastman help

Today, the world depends on our insights to create the materials found in thousands of household and industrial products—from food storage to tires on your car. To do this, we work with customers worldwide to discover, develop, and innovate practical solutions that meet persistent and emerging needs in ever-changing global markets while maintaining a commitment to safety and sustainability.



Call us today to learn how Eastman can work with you to help you consistently produce excellent products.

EASTMAN

Eastman Chemical Company Corporate Headquarters

P.O. Box 431
Kingsport, TN 37662-5280 U.S.A.

Telephone:
U.S.A. and Canada, 800-EASTMAN (800-327-8626)
Other Locations, (1) 423-229-2000
Fax: (1) 423-229-1193

www.eastman.com/medical

Safety Data Sheets providing safety precautions that should be observed when handling and storing Eastman products are available online or by request. You should obtain and review the available material safety information before handling any of these products. If any materials mentioned are not Eastman products, appropriate industrial hygiene and other safety precautions recommended by their manufacturers should be observed.

It is the responsibility of the medical device manufacturer ("Manufacturer") to determine the suitability of all component parts and raw materials, including any Eastman product, used in its final product to ensure safety and compliance with requirements of the United States Food and Drug Administration (FDA) or other international regulatory agencies.

Eastman products have not been designed for nor are they promoted for end uses that would be categorized either by the United States FDA or by the International Standards Organization (ISO) as implant devices. Eastman products are not intended for use in the following applications: (1) in any bodily implant applications for greater than 30 days, based on FDA-Modified ISO-10993, Part 1, "Biological Evaluation of Medical Devices" tests (including any cosmetic, reconstructive, or reproductive implant applications); (2) in any cardiac prosthetic device application, regardless of the length of time involved, including, without limitation, pacemaker leads and devices, artificial hearts, heart valves, intra-aortic balloons and control systems, and ventricular bypass assisted devices; or (3) as any critical component in any medical device that supports or sustains human life.

For manufacturers of medical devices, biological evaluation of medical devices is performed to determine the potential toxicity resulting from contact of the component materials of the device with the body. The ranges of tests under FDA-Modified ISO-10993, Part 1, "Biological Evaluation of Medical Devices" include cytotoxicity, sensitization, irritation or intracutaneous reactivity, systemic toxicity (acute), subchronic toxicity (subacute), implantation, and hemocompatibility. For Eastman products offered for the medical market, limited testing information is available on request. The Manufacturer of the medical device is responsible for the biological evaluation of the finished medical device.

The suitability of an Eastman product in a given end-use environment is dependent on various conditions including, without limitation, chemical compatibility, temperature, part design, sterilization method, residual stresses, and external loads. It is the responsibility of the Manufacturer to evaluate its final product under actual end-use requirements and to adequately advise and warn purchasers and users thereof.

© 2014 Eastman Chemical Company. Eastman, Aspira, Cadence, Cerfis, DuraStar, Eastar, Eccel, Embrace, Provista, Spectar, Tenite, The Glass Polymer, The results of insight, and Tritan are trademarks of Eastman Chemical Company. All other brands are the property of their respective owners.