

# At innovation's feet

*Innovative solutions for the footwear industry*

When creating footwear, it's important to consider the raw materials and necessary additives for each component. Luckily, brands and designers can find the right solution for several components with Eastman—whether it's thermoplastic polyurethanes for soles, non-phthalate plasticizers for PVC applications, or polyols in heel cap finishing.

Better yet, we offer the technical support, material expertise, regulatory compliance, and reliable supply chain to facilitate global go-to-market strategies.

## *Eastman solutions for footwear*



## Plasticizers

Our plasticizers for synthetic laminates—found in the vamp—and shoe soles are effective products for PVC flexibilization, providing durability and good aesthetics. Providing compliant solutions that don't compromise on performance, our portfolio of effective non-phthalate plasticizers include:

- Eastman 168™ non-phthalate plasticizer, a globally commercialized plasticizer with proven performance for more than 40 years, demonstrating:
  - Compatibility with PVC and PVC/VA copolymer resins
  - Excellent mechanical properties
  - Excellent low-temperature flexibility
  - Resistance to extraction by soapy water
  - Excellent nonmigration properties
  - Viscosity stability
- Eastman VersaMax™ Plus plasticizer, an innovative product whose outstanding characteristics culminate in high efficiency and productivity through:
  - Lower processing temperatures
  - Faster fusion and lower viscosity
  - Enhanced compatibility in PVC formulations
  - Better clarity in finished products

## Thermoplastic polyurethanes

Eastman Thermollan™ thermoplastic polyurethane offers the chemical and mechanical resistance valued in many types of footwear, including football boots and safety shoes. Moreover, its versatility allows both rigid and flexible formulations without compromising comfort and aesthetics.

Considered an engineering plastic, Thermollan is largely employed in soles, heels, and heel caps, demonstrating:

- Chemical resistance
- Abrasion resistance
- Weather resistance
- Excellent flexibility
- Wide range of hardness
- Durability
- Excellent performance at low temperatures
- Recyclability

## Polyester polyols

Eastman offers a wide range of polyester polyols, which produce desired chemical and abrasion resistance for various shoe components such as soles, flexible foams, polyurethane laminates, and varnish for footwear finishing.

## About Eastman

Eastman is a global company with manufacturing sites and offices in North America, Europe, Asia, and Latin America. Pioneers in the development of non-phthalate plasticizers, the company produces a wide range of materials 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.

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To see how Eastman innovations can advance your shoe designs, contact your Eastman representative for samples or visit [br.eastman.com](http://br.eastman.com).

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**EASTMAN**  
The results of insight™

### Eastman Corporate Headquarters

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

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

[www.eastman.com/locations](http://www.eastman.com/locations)

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