

PORON®

Antishock and Comfort

Antishock and Comfort for the life of the shoe!

Superior Comfort for the Life of the Shoe with **PORON** Cellular Urethane Designed Specifically for the Insole

The insole is the structural heart of the shoe – affecting both the comfort and the life of the shoe. **PORON** cellular urethane offers shoe manufacturers a superior cushion insole that absorbs shock, won't bottom out with wear or become brittle with age, is breathable and lasts longer than sponge rubber, vinyl or latex foams.

Superior Shock Absorption

PORON material – with its distinctive porous structure – offers exceptional energy absorption capabilities and life-of-the-shoe resiliency.

Its unique cell structure helps protect feet and joints against constant pounding and out-performs other materials in shock absorption both before and after wear.

PORON – a micro-cellular urethane – has a very small and very uniform cell structure – about one million cells per square inch in 1/8-inch thick **PORON**. Each of these cells acts like a tiny spring, providing **PORON** with its superior ability to absorb shock. This unique cell structure also has excellent memory and recovery from compression, providing an extremely long life as a shock absorber.

Retains Flexibility – Won't Bottom Out

PORON retains its original shape, thickness and resiliency under normal wear conditions for the life of the shoe. It will not become brittle. And, it will not bottom out or take a compression set. The comfort built into the shoe in the factory, stays in the shoe for its useful life.

A urethane, not a vinyl, **PORON** has no plasticizers to leak out (plasticizers make a rigid material flexible). As a plasticizer leaves vinyl, the material reverts to its normal rigid state, becomes brittle, and will crack when flexed. **PORON** remains flexible down to minus 4°C.

A vinyl foam tends to compress and stay compressed – with no spring-back, it "takes a compression set". A collapsed foam provides little or no comfort under the foot. **PORON**, with its excellent memory, will not bottom out or take a compression set – providing comfort for the life of the shoe.

Breathability

Because of its unique cell structure, **PORON** is breathable, with high water vapour transmission for dryness and coolness.

The cells in this "open cell structure" are interconnected, allowing water vapor to pass through the material. The interconnections are small enough that fluid water has difficulty entering the material, but perspiration vapor, up to 20 grammes per square foot per day, passes uninhibited.

Comfort

PORON retains its dimensional stability while resisting a variety of shoe conditions – shoe odour, heat, humidity, moisture, stitch stress, adhesives, abrasion, friction and tension. **PORON** is also light weight, has a smooth surface or nice hand and resists piping.

Engineered to Meet Specific Foot Cushioning Needs

PORON is available in various firmnesses to meet a variety of foot cushioning needs. By controlling thickness and density **PORON** can be formulated for each application – whether in work shoes, athletic shoes, dress shoes, women's or children shoes. **PORON** provides all the properties you and your customer most want in an insole – a superior insole that cushions the feet and lasts for the life of the shoe.

Multiple Benefits from One Insole Material

- Absorbs foot shock – cushions the feet
- Resiliency for the life of the shoe – won't bottom out
- Breathability – foot comfort – lets water vapor and perspiration move away from the foot
- Resists abrasion – excellent for work, athletic and children's shoes
- Will not harden or change properties – no plasticizers to migrate
- Smooth wrinkle free surface – doesn't require supplementary covering