



DALTOPED® LITE ENERGY

For lightweight, dynamic comfort shoes

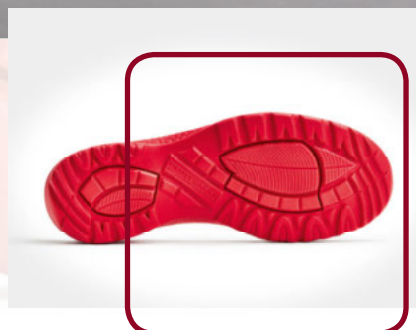
The DALTOPED® LITE ENERGY polyurethane soling solution is a high resilience material, perfect for footwear manufacturers looking to deliver athleisure and sports shoes in line with the latest fashion and performance trends.

Meeting customers' needs for comfort, quality and customization, this innovative, high performing, hybrid soling technology was developed for the production of midsoles for sports footwear and for the manufacture of single density soles for athleisure shoes – worn during workouts but also casually, for comfort.

An enhanced substitute to ethyl vinyl acetate (EVA), DALTOPED® LITE ENERGY polyurethane soling solution is the ideal material for manufacturers wanting to upgrade existing polyurethane soling solutions in terms of rebound and elasticity.

Key features

- Lightweight
- High rebound and cushioning
- Cold temperature resistant
- Hydrolysis resistant
- Excellent physical properties compared to EVA



Benefits

Performance benefits:

Comfort

- Lightweight
- Cushioning effect
- High resilience
- Cold temperature resistant

Durability

- Hydrolysis resistant
- Good compression set
- Abrasion resistant

Design

- Multiple color possibilities
- Suitable for PU/PU, PU/TPU, PU/VR
- Outstanding flow for design flexibility

Processing benefits

- Excellent flow
- Good blend stability in machine tanks
- Compatible with all existing and evolving shoe manufacturing techniques such as automation, speed, spraying, casting, etc. ...
- Excellent physical properties compared to EVA
- Production flexibility as one system can be used for both midsole and single density

Cost benefits

- No additional investment required (suitable for processing on conventional polyurethane machinery)
- Low density
- Low scrap rate because of good flow and mold filling
- Lower energy consumption and assembling costs (compared to EVA)

Striving for sustainability

We are dedicated to the development of sustainable soling solutions that can support the footwear industry's environmental ambitions. A signatory to the United Nations Global Compact (UNGC) - the world's largest voluntary corporate citizenship initiative - our work is guided by the UN's 17 Sustainable Development Goals. All 17 UN Sustainable Development Goals are important to our business - with three of particular relevance to our work in the global footwear sector.

3 GOOD HEALTH AND WELL-BEING



- Lightweight materials for comfort
- Phthalate- and tin-free
- High rebound and cushioning effect for comfort
- Cold temperature resistant
- Lower VOC (compared to EVA)

8 DECENT WORK AND ECONOMIC GROWTH



- Design flexibility
- Compatible with both automation and conventional machinery

12 RESPONSIBLE CONSUMPTION AND PRODUCTION



- Low density
- Long lasting products
- Energy efficient process
- Low scrap rate

Committed to our customers

We are committed to providing our customers with outstanding levels of support. We achieve this by:

- Employing experienced technical service people
- Providing trouble shooting advice
- Performing regular quality checks
- Offering sampling and proto-typing services
- Developing tailor-made solutions
- Co-innovating for the future
- Supporting product compliance needs
- Delivering dedicated training including MDI safe handling

Typical properties

	EVA	Conventional PU	DALTOPED® LITE ENERGY technology (unit soles)	DALTOPED® LITE ENERGY technology (midsoles)
Density (kg/m³)	250	450 – 600	450 – 500	350 – 450
Trouser tear (N/mm)	3.4	2.5 – 7.0	3.5 – 4.5	2.5 – 3.5
Hardness tailor made (Sh.A)	32	45 – 75	35 – 45	30 – 40
Hardness tailor made (Ask.C)	55	70 – 80	60 – 70	53 – 65
Tensile strength (MPa)	2.7	2.5 – 5.0	2.5 – 3.5	2.5 – 3.0
Elongation (%)	270	300 – 400	340	> 300
Flex life	Good	Excellent	Good	NA
Abrasion (mg loss)	150 – 200	50 – 150	70 – 100	NA
Resilience (%)	40 – 50	30	45 – 50	45 – 50
Compression set @RT (%)	20	8	< 10	< 10





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About Huntsman:

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