



# HUNTSMAN

Enriching lives through innovation

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## About Huntsman:

Huntsman Corporation is a publicly traded global manufacturer and marketer of differentiated and specialty chemicals with 2018 revenues more than \$9 billion. Our chemical products number in the thousands and are sold worldwide to manufacturers serving a broad and diverse range of consumer and industrial end markets. We operate more than 75 manufacturing, R&D and operations facilities in approximately 30 countries and employ approximately 10,000 associates within our four distinct business divisions. For more information about Huntsman, please visit the company's website at [www.huntsman.com](http://www.huntsman.com).

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Innovative soling solutions

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## DALTOPED® X-LITE

### For lightweight, dynamic comfort shoes

The DALTOPED® X-LITE polyether soling solution is an innovative material for the casual, sports and athleisure market.

A water-blown based solution, DALTOPED® X-LITE polyether soling solution is suitable for the casting and direct-on processing of unit soles and midsoles.

DALTOPED® X-LITE polyether soling solution can be used on existing polyurethane processing equipment, meaning no additional machinery investment is required. This makes DALTOPED® X-LITE polyether soling solution technology an excellent alternative to ethyl vinyl acetate (EVA).

### Key features

- Lightweight
- Hydrolysis resistant
- Flex performance
- Abrasion resistant
- Processing at low densities





Benefits

Performance benefits:

- Comfort
- Lightweight (comparable to EVA)

Durability

- Hydrolysis resistant
- Flex performance\*
- Abrasion resistant\*

\* Certification of independent testing available on request

Design

- Multiple color possibilities
- Suitable for PU/PU, PU/TPU, PU/VR combinations
- Design flexibility

Processing benefits

- Room temperature processing
- Excellent flow
- Wide processing latitude
- Compatible with all existing and new shoe manufacturing techniques such as automation, speed, spraying, casting, etc. ...

Cost benefits

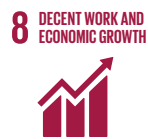
- Suitable for processing on conventional polyurethane machinery
- No additional investment required
- Production efficiency due to raw material consistency
- Lower density and low reject rates
- Avoids time and material losses as the same system, on the same machine, can be used for both single density and dual density

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.



- Lightweight materials for comfort
- Phthalate- and tin-free



- Water-blown technology
- Design flexibility



- Low density
- Long lasting products
- Energy efficient process
- Low reject 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	DALTOPED® X-LITE technology
Density (kg/m³)	300	350
Hardness (Shore A)	45	50 – 55
Split tear (N/mm)	2.8	2.9
Trouser tear (N/mm)	4.2	5.8
Tensile strength (MPa)	1.8	2.8
Elongation (%)	250	270
Bennewart Flex life (mm cut growth) After 30,000 cycles	0	0
Bennewart Flex life (mm cut growth) After 90,000 cycles	< 2	< 2
Resilience (pendulum / %)	30	30
Abrasion (mg loss)	250 – 300	35

