Innovative soling solutions





DALTOPED® DuraLite EnergyFor extra comfort in protective footwear

DALTOPED® DuraLite Energy lightweight polyurethane material combines the high cushioning and energy return properties with the durability needed to create long-lasting, protective work shoes for safety and military applications.

Low density midsoles made from DALTOPED® Duralite Energy polyurethane materials mix excellent shock absorbing and rebound properties with good stability. This powerful combination of properties can help prevent tired feet from rolling and reduce lower leg fatigue for people on the move all day.

Hydrolysis resistant and equipped with a good compression set and excellent cold flex characteristics, DALTOPED® Duralite Energy polyurethane materials can maintain dynamic performance at a wide temperature range, down to -25°C – meaning feet stay cushioned and comfortable, even in sub-zero conditions.

Key features

- Lightweight
- · High energy return
- Cushioning
- Durable





Ranafite

PERFORMANCE

Comfort

- · Lightweight
- Cushioning
- High energy return
- Excellent dynamic performance to -25°C

Design

- · Multiple color options
- Design flexibility

Durability

- · Hydrolysis resistant
- · Good compression set
- Good cold flex performance

PROCESSING

- · Suitable for direct-on processing
- · Low reject rate
- · Excellent flow
- · Compatible with latest processing techniques
- · Good raw material consistency

COST

- No additional equipment investment needed
- · Supports efficient production
- · Lower density
- Less waste





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.



Reducing fatigue

- · Lightweight
- · High rebound
- · Cushioning effect



Workers protection

- · Free from hazardous classified solvents
- · REACH compliant



Efficient use of material resources

- · Low density
- · Low scrap rate
- · Increased durability and lifetime

Technical properties	Unit	Conventional PU	DALTOPED® DuraLite Energy
Density	Kg/m³	400-450	380-420
Hardness	Shore A	45-50	35-40
Trouser tear	N/mm	>4	>4
Tensile strength	Мра	>3.5	>3.5
Elongation	%	>300	>350
Resilience	%	30-35	50-55
Electrical resistance	Mohm	>35	>35
Elastomeric behaviour below 0°C	Tg (°C)	-15°C	-25°C

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