

Unitex[®] squeegees printing for the long run

Unitex® Marathon

Unitex[®] Marathon provides premium screen printing performance and quality at a competitive price. Made from high grade Diphenylmethane Diisocyanate (MDI) polyurethane, Unitex[®] Marathon is compatible with a wide range of graphic screen printing systems, providing superior resistance to degradation by commonly used inks, solvents and monomers used in modern printing processes.

Profile

Plain Double Triple Diamond D-Cut 45° and 62° D-Cut with Land 45° and 62° S-Cut 45° and 62° S-Cut with Land 45° and 62°









D cut and





Triple

Benefits:

- Compatible with most textile and UV graphic inks
- Resistant to solvents used in modern ink systems
- Precision printing edge
- Excellent abrasion resistance
- Made from high grade polyurethane
- · Compatible with a wide range of inks and systems
- Tight manufacturing tolerances
- Consistent durometer to keep your colors strong and vibrant
- High degree of inspection

Durometer/color coding

Tolerance: +/- 3° Shore A



Softer squeegee More ink, richer colours Harder squeegee Less ink, greater detail

Graphic screen printing

Typical Unitex[®] Marathon squeegee applications for the graphic printing include:

- Plastics
- PVC
- Decals
- Vinyl
- Paper
- Labels

Typical ink systems:

- UV
- Solvent based
- Water based

Unitex[®] Marathon can also be used in textile printing.

Squeegee solvent swell test

80 Shore A Single Durometer Volume Swell Test in High Intensity White UV Ink System



mersed in ink for 4 hours - complete test repo available on request

Unitex[®] Marathon exceeds the performance of similar squeegees on the market

Specifications

Dimensions	Plain section	Tolerance
Length	Up to 3750 mm (147")	+/- 10 mm
Width	15 - 50 mm (0.6 - 2")	+/- 0.5 mm
	50 - 100 mm (2 - 4")	+/- 1 mm
	100 - 610 mm (4 - 24")	+/- 5 mm
Thickness	Up to 12.5 mm	+/- 0.4 mm
Туре	Hardness	Tolerance
Unitex [®] Marathon	60° - 90° Sh A in 5° increments	+/- 3° Shore A

Available in different profiles, hardnesses and sizes on request.

Technical data chart

Physical Property	Values	Standard
Tensile break strength	47.4 Mpa	BS ISO 37:2017
Tensile break strain	560%	BS ISO 37:2017
Tensile stress at 100% elongation	3.42 Mpa	BS ISO 37:2017
Tensile stress at 300% elongation	8.39 Mpa	BS ISO 37:2017
Tear strength (die B - nicked)	43.53 kN/m	ISO 34-1:2010
Abrasion resistance - volume loss (rotating cylindrical drum - aluminium Oxide 60 grit)	44 mm ³	BS ISO 4649:2017
Solvent swell mass increase - 2hr submersion in cyclohexanone	17.9%	BS ISO 1817:2005
Solvent swell hardness decrease - 2hr submersion in cyclohexanone	-10 Shore A	BS ISO 1817:2005
Solvent swell hardness recovery - cyclohexanone 2hr + 120hr recovery	-3 Shore A	BS ISO 1817:2005
Retained hardness post swell - cyclohexanone 2hr + 120hr recovery	96.05%	BS ISO 1817:2005
Retained tensile break strength post swell - cyclohexanone 2hr + 120hr recovery	57.49%	BS ISO 1817:2005
Retained tensile break strain post swell - cyclohexanone 2hr + 120hr recovery	89.96%	BS ISO 1817:2005
Retained tensile stress at 100% elongation post swell - cyclohexanone 2hr + 120hr recovery	74.20%	BS ISO 1817:2005
Retained tensile stress at 300% elongation post swell - cyclohexanone 2hr + 120hr recovery	69.55%	BS ISO 1817:2005
Average percentage of retained properties post swell	77.45%	BS ISO 1817:2005
Resilience - rebound resilience	31%	DIN 53512:2000

Contact Us

Trelleborg Applied Technologies delivers innovative and reliable solutions that maximize business performance to meet your needs. Our dedicated and highly skilled staff are always on hand to provide seamless process support from initial idea, through to delivery and beyond.

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