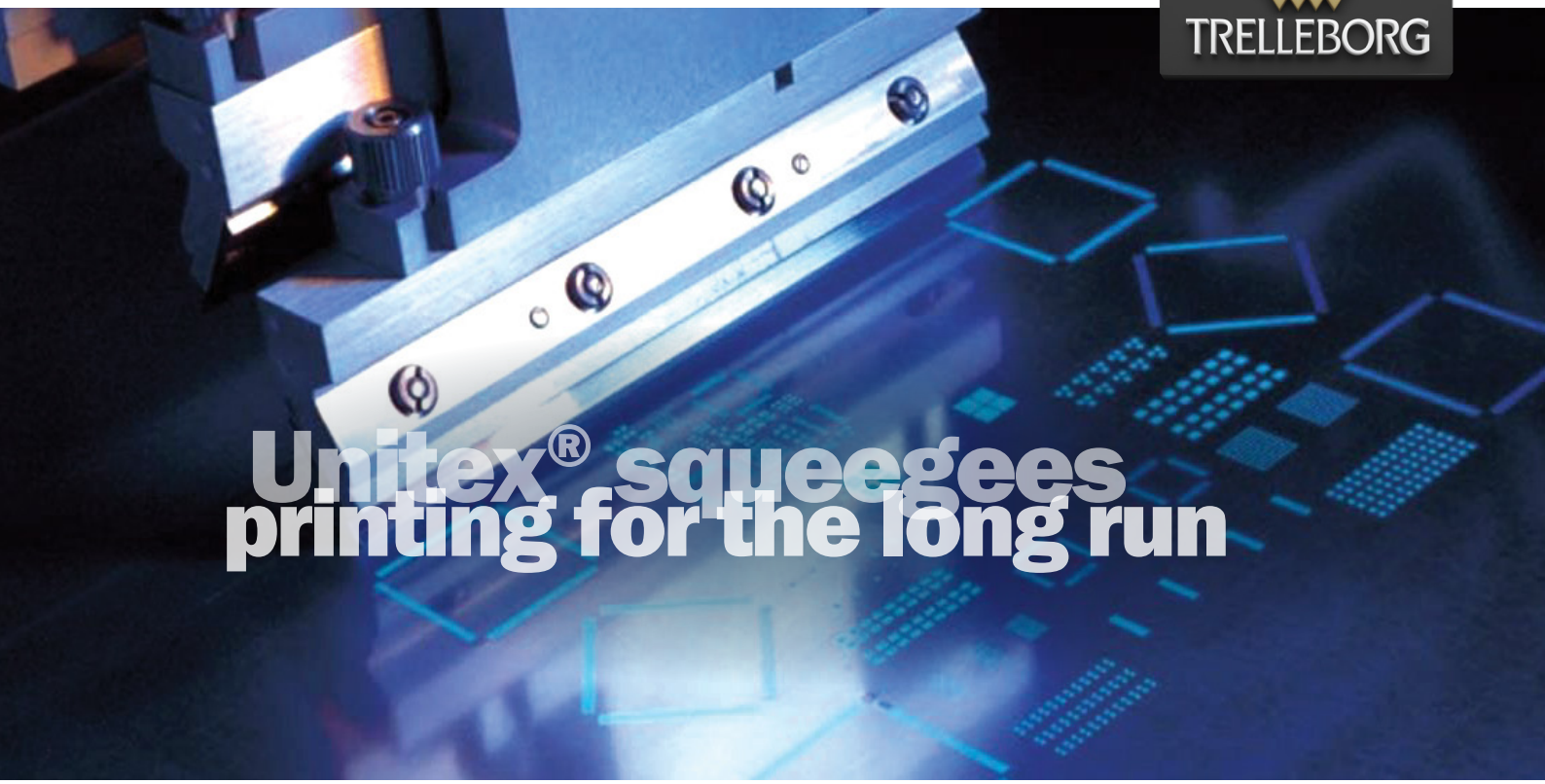


Unitex® Ulon HP

Unitex® Ulon HP squeegee range provides optimum performance for the most demanding electronics and glass screen print applications.

Manufactured from (Naphthalene Diisocyanate) (NDI) polyurethane technology, which provides a high of chemical and abrasion resistance, even when exposed to chemical systems. Unitex® Ulon HP is widely recognized as the best squeegee for use with solvent and UV based inks.

Benefits:

- Market leading wear and tear resistance – ideal for printing thick and thin films, as well as minimizing the use of expensive conductive inks
- Precision edge – exceptional quality, especially for printing ultra-thin lines
- Resistant to solvents used in modern conductive and non-conductive ink systems
- Made from Vulkollan® one of the most innovative and technically advanced elastomers in the world

Durometer/color coding

Tolerance: +/- 2.5° Shore A

PU500/1	PU500/3	PU500/3-4	PU500/4
55-60°	60-65°	65-70°	70-75°
YELLOW	RED	RED	GREEN

PU500/8	PU500/9	PU101/9	PU500/15
75-80°	80-85°	85-90°	90-95°
BLUE	BROWN	FAWN	PINK

Softer squeegee
More ink, thick film

Harder squeegee
Less ink, finer track spacing

Unitex® Ulon HP can offer up to a 43% cost saving on ink usage

Profile

Plain
Composite
Composite D-Cut
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°


Plain


Composite


Diamond


D cut and D cut with Land


S cut and S cut with Land

Electronic screen printing

Unitex® Ulon HP is used in many electronic screen printing applications, especially in high end consumer touch panel devices such as mobile phones and tablets. Other applications include:

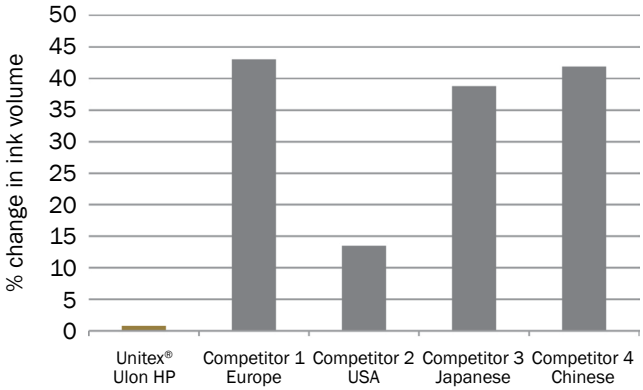
- Flexible circuits for membrane touch switches and graphic overlays
- Biosensors and electrocardiogram electrodes
- Contactless smart cards and RFID labels
- Electroluminescent lamps
- Rigid and flexible printed circuit boards and potentiometers
- PV (Photovoltaic) / solar wafers used for depositing layers of Ag and Al paste to 'Busbars' and 'Fingers'
- Insulators, batteries and heating elements

Typical conductive & non-conductive ink systems:

- Silver
- Carbon
- Gold
- Dielectric
- Palladium

Accelerated squeegee wear test

70-80 Shore A Hardness - Single Durometer



Squeegee prints measured before and after 50 print passes on silicon carbide abrasive – 2500 grit (8.4 µm). **Independent test by the Welsh Centre for Printing and Coatings –report available on request**

Glass screen printing

Unitex® Ulon HP is ideal for screen printing on flat glass, it is used in many automotive and architectural applications.

Typical ink systems:

- Epoxy
- Enamel
- UV
- Solvent based

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

Type	Hardness	Tolerance
Unitex® Ulon HP	60° - 95° Sh A in 5° increments	+/- 2.5° Shore A

Available in different profiles, hardnesses and sizes on request.

Technical data chart

Physical Property	Values	Standard
Tensile break strength	43.6 Mpa	BS ISO 37:2017
Tensile break strain	635%	BS ISO 37:2017
Tensile stress at 100% elongation	3.00 Mpa	BS ISO 37:2017
Tensile stress at 300% elongation	5.78 Mpa	BS ISO 37:2017
Tear strength (die B - nicked)	37.22 kN/m	ISO 34-1:2010
Abrasion resistance - volume loss (rotating cylindrical drum - aluminium Oxide 60 grit)	18 mm^3	BS ISO 4649:2017
Solvent swell mass increase - cyclohexanone 2hr	23.51%	BS ISO 1817:2005
Solvent swell hardness decrease - cyclohexanone 2hr	-11 Shore A	BS ISO 1817:2005
Solvent swell hardness recovery - cyclohexanone 2hr + 120hr recovery	0 Shore A	BS ISO 1817:2005
Retained hardness post swell - cyclohexanone 2hr + 120hr recovery	100%	BS ISO 1817:2005
Retained tensile break strength post swell - cyclohexanone 2hr + 120hr recovery	86.45%	BS ISO 1817:2005
Retained tensile break strain post swell - cyclohexanone 2hr + 120hr recovery	94.02%	BS ISO 1817:2005
Retained tensile stress at 100% elongation post swell - cyclohexanone 2hr + 120hr recovery	96.61%	BS ISO 1817:2005
Retained tensile stress at 300% elongation post swell - cyclohexanone 2hr + 120hr recovery	94.93%	BS ISO 1817:2005
Average percentage of retained properties post swell	94.40%	BS ISO 1817:2005
Resilience - rebound resilience	45%	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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