

TEPU™ 50A

TEPU™ 50A is a medium-soft elastomer with excellent compression strength, UV stability and chemical resistance.

MECHANICAL PROPERTIES	TEST STANDARD	VALUE
Ultimate Tensile Strength	ASTM D412	1.79 Mpa (259.62 psi)
Elongation at Break	ASTM D412	128%
Elastic Modulus	ASTM D412	2.48 Mpa (359.69 psi)
Shore Hardness	ASTM 2240	49A
Tear Propagation	ASTM-D624	7.50 kN/m (42.83lbf/in)
Tear Strength	ASTM D624	5.02 kN/m (28.66 lbf/in)
Compression Set, 23 °C, 72 h	ASTM D395-B	7.73%
Compression Set, 70 °C, 72 h	ASTM D395-B	19.74%
Compression Set, 125 °C, 24 h	ASTM D395-B	64.37%

THERMAL PROPERTIES	TEST STANDARD	VALUE
Glass Transition Temperature (DMA, Tan δ)	ASTM D4065	-21 °C (-5.8 °F)
Glass Transition Temperature (DSC)	ASTM D4065	-28 °C (-18.4 °F)

To the best of our knowledge the information contained herein is accurate. However, Inkbit Corporation makes no warranty, expressed or implied, regarding the accuracy of these results to be obtained from the use thereof.

CHEMICAL COMPATIBILITY

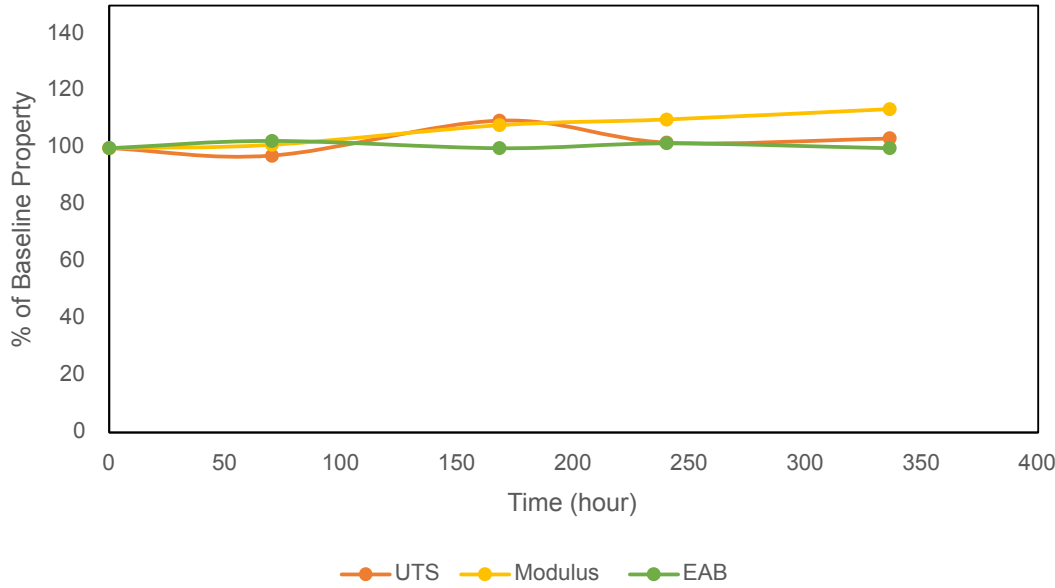
Percent weight gained after five days submersion at 25 °C, following ASTM D543.

SOLVENT	5 DAY WEIGHT GAIN
Engine Oil	0.3%
Water	<4%
Isopropanol	21%
Ethanol	26%
Hexane	0.4%
Ethylene Glycol	2%
Mineral Oil	0.6%
Windex	<8%
Coke (original)	<3%

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HEAT AGING AT 100 DEG

TEPU™ 50A Heat Aging at 100 deg C



HEAT AGING AT 100 DEG

	TEST STANDARD	% CHANGE AFTER 70 HRS	%CHANGE AFTER 168HRS
Shore Hardness A	ASTM 2240	0.80%	1%

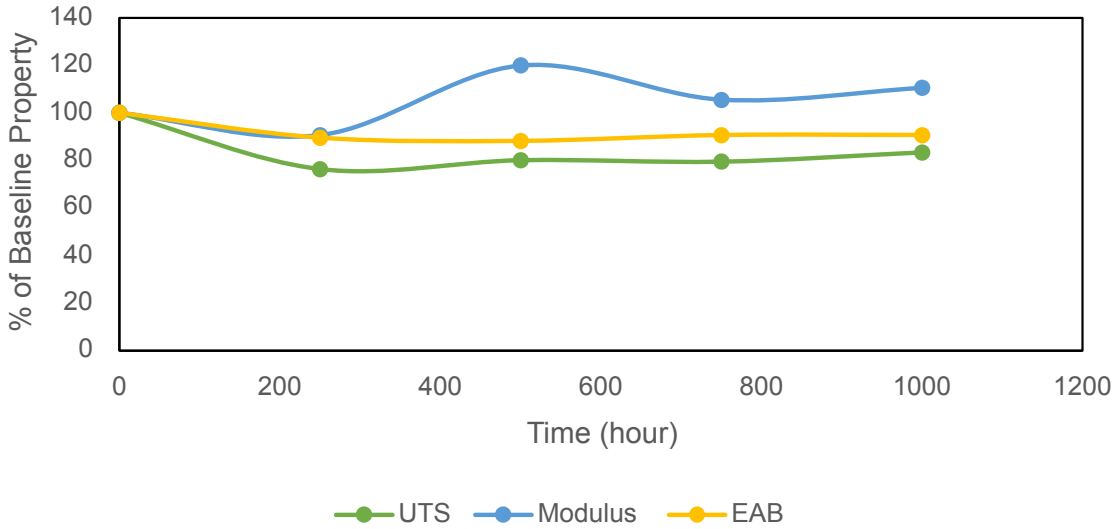
HEAT AGING AT 125 DEG

	TEST STANDARD	% CHANGE AFTER 24 HRS	%CHANGE AFTER 70 HRS
Shore Hardness A	ASTM 2240	6%	8%

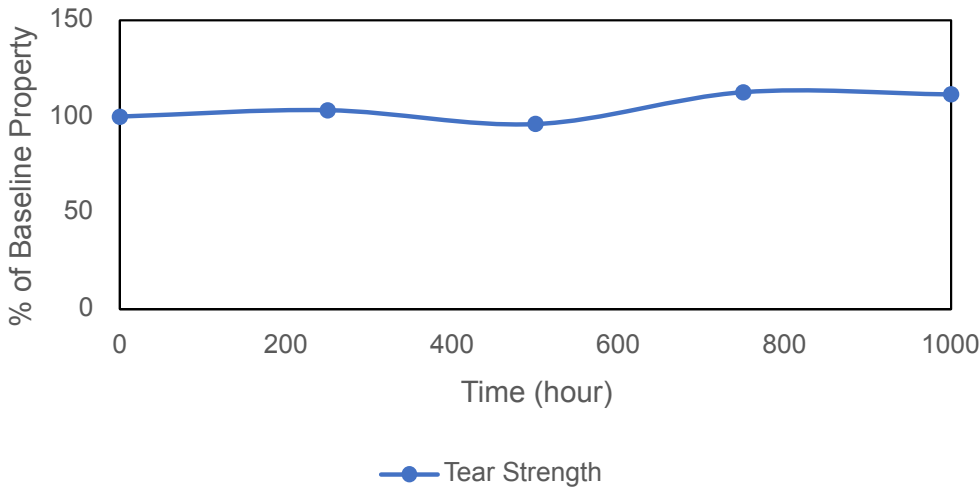
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UV AGING

TEPU™ 50A UV Aging



TEPU™ 50A UV Aging



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