

Technical Data Sheet

Type: Estane® X595A-3FR TPU is a Shore 94A, polyester type thermoplastic polyurethane elastomer.

Uses: Film Blowing, Extrusion

Physical Properties	Standard No.	Units	Value
Hardness	ASTM D2240	Shore A	94
Specific Gravity	ASTM D792	g/cm ³	1.22
Mechanical			
Tensile Stress:	ASTM D412	kgf/cm ²	
At 100% elongation			120
At 300% elongation			210
Tensile Strength	ASTM D412	kgf/cm ²	400
Ultimate Elongation	ASTM D412	%	550
Tear Resistance (Die C)	ASTM D624	kgf/cm	115
Compression Set	ASTM D395		
At 23°C X22hr		%	15
At 70°C X22hr		%	60
Thermal			
Vicat Softening Temperature	ASTM D1525	°C	105

*Test samples were annealed at 100°C and 24 hours at room temperature before testing.

**These are typical values and should not be used for specifications.

The information contained herein is believed to be reliable, but no representations, guarantees or warranties of any kind are made as to its accuracy, suitability for particular applications or the results to be obtained. The information often is based on laboratory work with small-scale equipment and does not necessarily indicate end product performance or reproducibility. Formulations presented may not have been tested for stability and should be used only as a suggested starting point. Because of the variations in methods, conditions and equipment used commercially in processing these materials, no warranties or guarantees are made as to the suitability of the products for the applications disclosed. Full-scale testing and end product performance are the responsibility of the user. Lubrizol Advanced Materials, Inc. shall not be liable for and the customer assumes all risk and liability for any use or handling of any material beyond Lubrizol Advanced Materials, Inc.'s direct control. The SELLER MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Nothing contained herein is to be considered as permission, recommendation nor as an inducement to practice any patented invention without permission of the patent owner.

