

Estane® TPU for Hydraulic Seals and Gaskets



Overview

Hydraulic seals and gaskets are required to withstand extreme temperatures and physical wear and tear. In order to maintain their durability and life expectancy they must be formulated with the best products available and held to rigorous requirements.

Estane® TPUs have been put to the test and continue to provide outstanding performance by meeting and exceeding application requirements. With one of the lowest compression sets in their material class, Estane® TPUs are ideal for use in hydraulic seal and gasket applications.

Estane X-1264 and Estane 58149 TPUs are 95A polyester TPUs designed for use in hydraulic seals and gaskets. They exhibit excellent compression set resistance at 70°C and 100°C, respectively.

Major Benefits

TPUs are widely applied as the chemical backbone for hydraulic seal and gasket materials which can be formulated to meet a wide range of application specifications where low compression is key.

- Low compression set
- Operational temperature resistance up to 200°F
- High wear resistance
- Resists severe shock
- Withstands momentary pressure spikes
- Abrasion resistance

Compression Set Performance per ASTM D395 B

Conditions	Estane® X-1264 TPU	Estane® 58149 TPU
22 hours @ 70°C	23	23
70 hours @ 70°C	35	31
70 hours @ 100°C	Not Recommended	38

*Refer to technical data sheets for further material property details

All Samples were annealed at 120°C for 24 hours prior to compression set testing

Lubrizol's **Estane® TPU** for hydraulic seals and gaskets offers among the lowest compression set in its material class, along with excellent temperature, abrasion and deformation resistance as well as fluid compatibility.



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.

Lubrizol Advanced Materials, Inc. / 9911 Brecksville Road, Cleveland, Ohio 44141-3201 / 1.216.447.5000 / www.estane.com

© Copyright 2007 The Lubrizol Corporation
Estane, Estaloc and EstaGrip are trademarks of The Lubrizol Corporation

Printed in U.S.A.
ES-HYDSEL