WHAT IS SORBOTHANE?

Sorbothane is a Proprietary, Visco-Elastic Polymer, it is made out of a thermoset Polyether-Based, Polyurethane material.

In addition to this, Sorbothane also has a very high dampening coefficient. By combining shock absorption, good memory, vibration isolation, and vibration damping characteristics.

Compared to other materials that only provide one of the mentioned characteristics, such as rubber, neoprene, silicone, etc. Sorbothane combines all these benefits into a single material with a long fatigue life while providing a low creep life compared to other polymers.

Sorbothane has been shown to have an exceptional dampening coefficient over a wide temperature range in comparison to its competitors. Sorbothane' s operating temperature range is -20° to +160° Fahrenheit (-29° to 72° Celsius).

Unlike fluid-based shock absorbers or foam alternatives, Sorbothane absorbs shocks efficiently for millions of cycles, removing the need for metal springs to return the system to its original position after absorbing each shock.

Frequently Asked Questions

What is 'Durometer'?
Durometer is a measure of hardness used for polymers, a higher durometer is a indicator of a stronger material, Sorbothane is softer than rubber and most polymers, it is measured on the Shore "00" scale.

What durometers are available?
Sorbothane parts are normally cast between 30 and 70 durometers, however for special applications (at increased cost) Sorbothane can be as low as 20durometer and as high as 80 durometers.

What are vibration isolators and dampers?
A good vibration isolator lowers the natural frequency of a system to below the excitation (disturbing) frequency, keeping these two frequencies "out-of-sync" greatly reduces vibration problems.

Is Sorbothane fireproof?
You can purchase Sorbothane with a fire retardant that allows it to meet the Underwriters Laboratory 94 V2 standard.

Is Sorbothane Chemical-Resistant?
Generally, Sorbothane has a very high chemical resistance similar to other polyurethanes. However, it is recommended to avoid the following chemicals with its use: gasoline, alcohol and plastic solvents.

What does 'visco-elastic' mean?
Viscoelastic refers to any material that exhibits properties of both liquids (viscous solutions) and solids (elastic materials), Because viscoelastic behaviour is desirable in shock and vibration applications, many materials claim to be so, technically, they're correct, but only because they have trace "viscoelastic properties.

A viscous (liquid) material deforms under load and transmits forces in all directions, it distributes a small amount of pressure over a large area and doesn't recover is shape when a load is removed. An elastic material deforms under load and returns to its original shape when that load is removed.

How efficient is Sorbothane as a shock absorber?
Depending upon the application, Sorbothane is able to absorb up to 94.7% of shock energy.

How efficient is Sorbothane as a vibration damper?
Sorbothane can absorb over 50 percent of vibration energy over most of its temperature operating range at frequencies from 10 to 30,000 hertz.