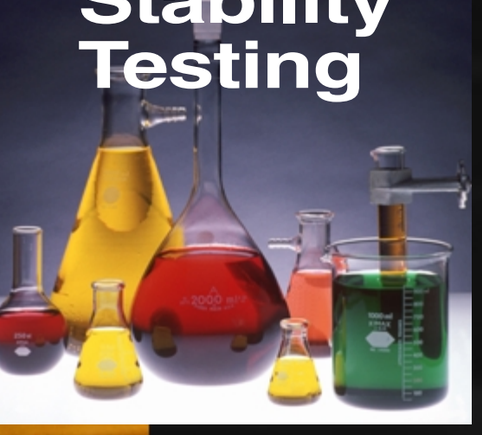
Southwest Research Institute™ specializes in

Shear Stability Testing



Sonic Shear Test

Originally developed as ASTM D 2603, this test method permits the evaluation of shear stability with minimum interferance from thermal and oxidative factors. It has been found to be applicable to fluids containing both readily-sheared and shear-resistant polymers. During this test, the sample is irradiated in a sonic oscillator and then the change in kinematic viscosity is determined. Correlation with performance in the case of hydraulic applications has been established using ASTM D 5621, while ASTM D 2603 has been successfully applied to hydraulic, transmission, tractor, and other fluids of similar applications. Correlation with performance in the case of automotive engine applications has, to date, not been established.

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Typical Test Conditions:

- Temperature: 0°C
- Duration: 40 minutes

Related Test Methods:

- The most widely used test methods for Sonic Shear testing are ASTM D 2603 and ASTM D 5621

A resonance control device developed by SwRI enables the Sonic Shear Test to automatically tune the frequency and vary amplitude to maintain specific resonance frequency at the applied set point (wattage). This provides consistant irradiation of the samples, which in turn gives SwRI better repeatability.

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