

USE

Apple juice is consumed as a beverage.

TEST EQUIPMENT

Instrument: Viscometer or Rheometer
Spring Torque Range: LV
Spindle: YULA-15E

Accessories:

- Enhanced UL Adapter (ULA-EY),
- TC-650SD Programmable Refrigerated Bath
- Speed: 50, 75 and 100 RPM



TEST METHOD

The Enhanced UL Adapter may be used with various Brookfield Viscometers or Rheometers. In our example, we used a Brookfield DV3TLV, with RheocalcT software for automated instrument control and data acquisition. Our test temperatures of 4°C and 25°C were maintained by direct immersion of the Enhanced UL Adapter sample chamber into a TC-650SD Programmable Refrigerated Bath. Representative data from the analyses are shown in Figure 1.

The Figure 1 graph shows relatively constant viscosities at 4°C (Blue Data: 2.5cP) and 25°C (Red Data: 1.4cP) over the speed range tested. This type of flow behavior is referred to as “Newtonian”. The graph also shows that the apple juice viscosity is higher at 4°C, than at 25°C. Increasing temperature typically decreases the viscosity of a given substance.

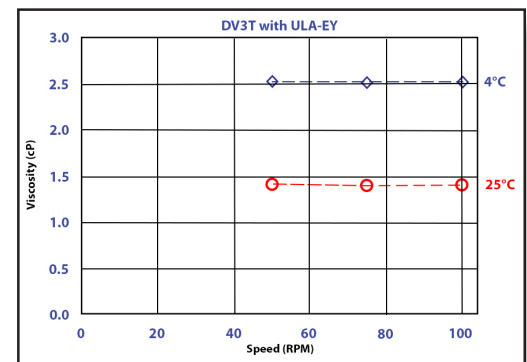


Figure 1: Apple Juice at 4°C and 25°C