OPERATING INSTRUCTIONS

BOSTWICK CONSISTOMETER

1. INTRODUCTION

The CONSISTOMETER is an instrument used to determine the consistency of viscous materials by measuring the distance that the material flows under its own weight in a given time interval. The instrument allows producers of such viscous products as jellies, preserves, sauces, etc., to predetermine formulas for their product and to standardize production lots.

2. DESCRIPTION

The CONSISTOMETER is made of stain-resistant metal. It consists of a trough divided into two sections by a gate. The smaller section serves as a reservoir for the material to be tested. The larger section is graduated along the bottom in one-half centimeter divisions beginning at the gate. The gate is spring-operated and is held by a trigger that permits instantaneous release. In operation, the gate slides vertically in the grooves of two posts extending upward from the sides of the trough. The L-shaped trigger release hooks over the top of the gate to hold it in a closed position. Two leveling screws are located at the reservoir end of the trough and a circular spirit level is located at the other end of the trough.

3. SETTING UP THE INSTRUMENT

Place the CONSISTOMETER on a **LEVEL** surface and adjust the leveling screws until the bubble in the circular level is centered. Check the level by placing another spirit level, such as a CSC Scientific Co. No. P36446 on the bottom of the trough about midway along the length of the graduated section. The two levels should agree. If they do not, then proceed as follows:

Adjust the leveling screws until the bubble of the level in the trough is centered. Then, bend the pointed, vertical lip of the CONSISTOMETER slightly until the two levels agree. Do not bend the horizontal part of the lip as this may prevent proper leveling of the instrument.

Close the gate and hook the trigger release over the top.

The material to be tested should be prepared by holding it at a constant temperature (usually 20 degrees C or 68 degrees F) for several hours to assure a uniform temperature throughout.

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MANUFACTURERS AND DISTRIBUTORS OF LABORATORY EQUIPMENT
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CONSISTOMETER
No. 24925-000

4. OPERATION

Fill the reservoir with the material to be tested and level off the top with a spatula or other straight-edge.

Press down on the trigger to open the gate and, at the same time, start a stopwatch. At the end of the selected time period, determine how far the material has flowed along the trough. Take the maximum reading at the center of the trough and the minimum reading at the edge of the trough, and average the values. The average value is then compared against a previously determined standard.

When using the CONSISTOMETER, make certain that the gate is fully closed before filling the reservoir. The reservoir should always be filled completely to the top.

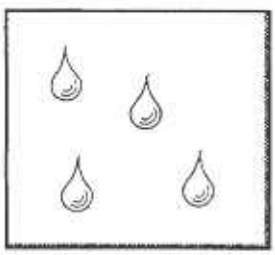
A material should always be tested as quickly as possible after being removed from the constant temperature oven or bath to prevent any consistency changes caused by temperature change or exposure to air.

5. MAINTENANCE

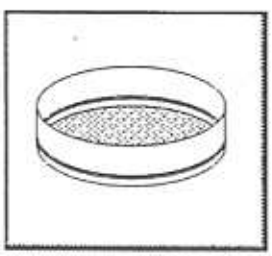
No maintenance should be necessary except occasional checking of the level, as explained in Section 3, and cleaning of the troughs after each test. Should any difficulty occur, contact CSC Scientific Co. for further instructions. Do not return the CONSISTOMETER without authorization from CSC Scientific.

6. ACCESSORIES

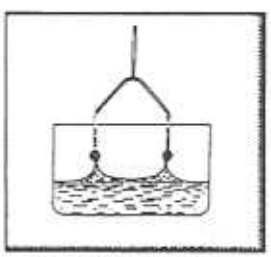
Description	CSC Catalog No.
Rubber Bumpers	P 27041
Replacement Spirit Level	P 36446
Replacement Springs	P 69969
Replacement Vane Assembly	P 77209



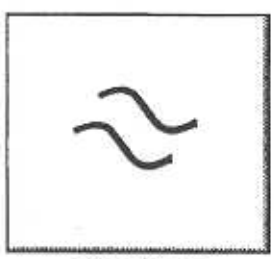
Moisture Analyzers
from PPM to 100%



Particle Size
Sieves - Shakers
Sieve Analyzer



Surface Tension
Interfacial - Precision



Flow Rate
Bostwick
Consistometer