

THERMOSEL™

FOR ELEVATED TEMPERATURE TESTING



WHAT'S INCLUDED?

- Choice of one 5C4 Spindle*
- Alignment Bracket
- Thermo Container with safety guard and insulating cap
- 1 Removable Sample Chamber (p50)
- 5 Disposable Sample Chambers (p50)
Order additional chambers in quantities of 100, HT-2DB-100
- Extracting Tools
- Temperature Controller with an RTD probe

*Specify when ordering

The difficulty with viscosity measurements of hot melts and liquids at elevated temperatures has been in maintaining accurate temperature control that is consistent from sample to sample so that meaningful data could be obtained.

The Brookfield Thermosel solves this problem by providing a stable, precisely controlled sample environment. This, together with the inherent accuracy of the Brookfield Viscometers, is fundamental to the Thermosel System, which produces viscosity measurements that are not only accurate but entirely reproducible.

Several factors contribute to the stable environment:

- Non-fluctuating temperature control
- Small sample volume and insulated sample chamber which reduces temperature gradients within the sample
- The rotating spindle, which acts as a built-in stirring device
- The test procedure is quite straightforward. Once familiar with the system, unskilled operators can easily produce accurate, reproducible data.

FEATURES & BENEFITS

- Provides control of sample temperature up to +300°C
- Programmable Controller offers single set point or up to 10 programmable set points. Temperature ramping between set points is possible if used with Rheocalc (DV-III Ultra & DV-II+Pro) Software
Note: Requires optional cable HT-106
- Compatible with standard Brookfield Viscometers and DV-III Ultra Rheometers
Note: requires optional cable DVP-141
- Supplied with reusable stainless steel sample container and five disposable aluminum sample chambers

APPLICATIONS

- Hot Melts
- Asphalt
- Wax
- Polymers



ADDITIONAL INFORMATION



Alignment Bracket ensures concentricity of spindle and sample chamber.



Other components supplied include sample chamber holder, RTD probe, insulating cap, coupling link, coupling nut and choice of SC4 spindle.



Extracting Tool enables the sample chamber to be handled easily and safely.



Option: Disposable Sample Chamber with Optional Disposable Spindle SC4-27D* is ideal for asphalts or any difficult-to-clean material.

Requires special adapter (Part No. SC4-D5Y).

THERMOSEL VISCOSITY RANGES cP(MPA•S)

SPINDLE SAMPLE VOLUME SHEAR RATE (sec ⁻¹)† MODEL	SC4-18 8mL 1.32N	SC4-31 10mL .34N	SC4-34 9.5mL .28N	SC4-21 8mL .93N	SC4-27* 10.5mL .34N	SC4-28 11.5mL .28N	SC4-29 13mL .25N	HT-DIN-81** 7mL 1.29N
LV DV-IIIU	1.2-30K	12-300K	24-600K	N/A	N/A	N/A	N/A	1.0-10K
LV DV-II+P	1.5-30K	15-300K	30-600K	N/A	N/A	N/A	N/A	3.4-10K
LV DV-I+	3-10K	30-100K	60-200K	N/A	N/A	N/A	N/A	3.4-10K
LV DVE	3-10K	30-100K	60-200K	N/A	N/A	N/A	N/A	N/A
LVT	5-10K	50-100K	100-200K	N/A	N/A	N/A	N/A	5.7-10K
RV DV-IIIU	N/A	N/A	N/A	20-500K	100-2.5M	200-5M	400-10M	14.6-10K
RV DV-II+P	N/A	N/A	N/A	25-500K	125-2.5M	250-5M	500-10M	36.5-10K
RV DV-I+	N/A	N/A	N/A	50-170K	250-830K	500-1.7M	1K-3.3M	36.5-10K
RV DVE	N/A	N/A	N/A	50-170K	250-830K	500-1.7M	1K-3.3M	N/A
RVT	N/A	N/A	N/A	50-100K	250-500K	500-1M	1K-2M	36.5-10K
HADV-IIIU	N/A	N/A	N/A	40-1M	200-5M	400-10M	800-20M	29.2-10K
HADV-II+P	N/A	N/A	N/A	50-1M	250-5M	500-10M	1K-20M	73.0-10K
HADV-I+	N/A	N/A	N/A	100-300K	500-1.7M	1K-3.3M	2K-6.7M	73.0-10K
HADVE	N/A	N/A	N/A	100-300K	500-1.7M	1K-3.3M	2K-6.7M	N/A
HAT	N/A	N/A	N/A	100-200K	500-1M	1K-2M	2K-4M	73.0-10K
HB DV-IIIU	N/A	N/A	N/A	160-4M	800-20M	1.6K-40M	3.2K-80M	116.8-10K
HB DV-II+P	N/A	N/A	N/A	200-4M	1K-20M	2K-40M	4K-80M	292.0-10K
HB DV-I+	N/A	N/A	N/A	400-1.3M	2K-6.7M	4K-13.3M	8K-26.7M	292.0-10K
HB DVE	N/A	N/A	N/A	400-1.3M	2K-6.7M	4K-13.3M	8K-26.7M	N/A
HB T	N/A	N/A	N/A	400-800K	2K-4M	4K-8M	8K-16M	292.0-10K

M = 1 million K = 1 thousand N = RPM † Spindle SC4-18 1.32 x 10 (rpm) = 13.2 sec⁻¹ cP = Centipoise mPa•s = milliPascal•seconds

N/A = Not applicable for historical reasons. However, it is possible to use any spindle/chamber combination with any torque range. Digital viscometers/rheometers will automatically calculate viscosity.

*Optional disposable SC4-27D spindle is available in quantities of 100, Part No. SC4-27D-100. Requires special chuck/closer, Part No. SC4-D5Y, for attachment to viscometer.

**The 81 spindle, Part No. HT-DIN-81, works in an HT-2 or HT-2DB chamber.