

BROOKFIELD VISCOMETER BATH

94830-3 SIMAIR® LOW TEMPERATURE BATH

ASTM D2983; IP 267 Method A*

- -40 to +30°C temperature range
- Accepts up to 12 SimAir® test cells
- Internal refrigeration unit
- Mounting for Brookfield Viscometer

The 94830-3 is a liquid filled, refrigerated viscometer bath that, when used in conjunction with patented SimAir® test cells and a Brookfield LV type rotational viscometer, meets the requirements of tests to ASTM D2983.

A digital temperature controller, 600W heater and refrigeration unit allows a bath temperature range of -40 to +30°C with a stability of ±0.1°C. The refrigeration system uses R507, a non CFC and non-ozone depleting refrigerant, and is capable of a cool down rate of approximately 20°C/hr.

An internal air flow system provides a blanket of warm air to protect the sample from moisture and prevent condensation build up on the oversize back lit viewing window.

In the event of a brief power interruption, a power saver facility allows the test to resume after power is restored. Safety devices include over-temperature, high pressure and low bath fluid cut-outs.

The casing is manufactured from stainless steel and thermoplastic. Mounting points for a Brookfield LV viscometer are situated on the top of the bath, and a 12 position carousel allows for rapid changeover between samples.

SUPPLIED WITH: viscometer mounting bracket, 12 position carousel, insulated flask lid, carousel port plugs, moisture cover, stirrer bar, spindle storage block, mains lead and instruction manual.

Notes: Supplied without Brookfield viscometer or SimAir® test cells. SimAir® is a trademark of Tannas Co.

* This bath, when used with SimAir® test cells simulates the Air Bath used for tests to ASTM D2983 and IP 267 Method A. It is **not** to be confused with the Liquid Bath used in IP 267 Method B.



A complete setup for measuring Brookfield Viscosity; a 94800-0 Viscometer mounted on a 94830-3 Bath with a 94835-0 SimAir® Test Cell

SPECIFICATIONS

Temperature range:	-40 to +30°C
Temperature stability:	±0.1°C
Bath type:	Liquid
Test cell capacity:	up to 12
Heating capacity:	600W
Cooling rate:	20°C/Hr
Refrigerant:	R507 non-ozone depleting
Voltage:	220V, 50Hz
Size (HxWxD):	47 x 42 x 66cm
Weight:	36kg

ACCESSORIES – SimAir® Low Temperature Bath

REQUIRED

94800-0	BROOKFIELD LV VISCOMETER
94835-0	SIMAIR® TEST CELL ASSEMBLY, (1 required for each carousel position in use).

94800-0 BROOKFIELD LV VISCOMETER

ASTM D2983; IP 267 Methods A & B

- 15 to 6,000,000 centipoise viscosity range
- 0.01 to 200rpm speed range
- Built in temperature probe
- Digital and analogue outputs

The 94800-0 is a digital, rotary Brookfield LV viscometer suitable for measuring viscosity of ATFs, lubricants, gear oils and hydraulic fluids in the range of 15 to 6 000 000 centipoise.

The viscometer features a speed range of 0.01 to 200 rpm in 54 steps and can continuously display viscosity (cP or mPa s), temperature (°C or °F), shear rate, shear stress, and % torque. The data can be displayed on the instrument or output via the parallel printer port, RS232 serial port, or as an analogue voltage for a chart recorder. An integral RTD probe measures the sample temperature.

Operation is via a large button and display panel. Alternatively, using the supplied software, it is possible to create test programmes with up to 25 steps on a personal computer and upload them to the viscometer when required.

SUPPLIED WITH: four LV type spindles, temperature probe, spindle guard, basic software, mains lead and instruction manual.

SPECIFICATIONS

Viscosity Range:	15 to 6 000 000 centipoise
Speed:	0.01 to 200 rpm
Parameters:	Viscosity, Temperature, % Torque, Shear Rate, Shear Stress
Output Ports:	Parallel, RS232 Serial, Analogue Voltage
Voltage:	220/240V, 50Hz
Size (HxWxD):	26 x 15 x 25cm
Weight:	10.5kg



CALIBRATION CERTIFICATE (WORKS)



SOFTWARE INCLUDED

94835-0 SIMAIR® TEST CELL ASSEMBLY

ASTM D2983; IP 267 Method A

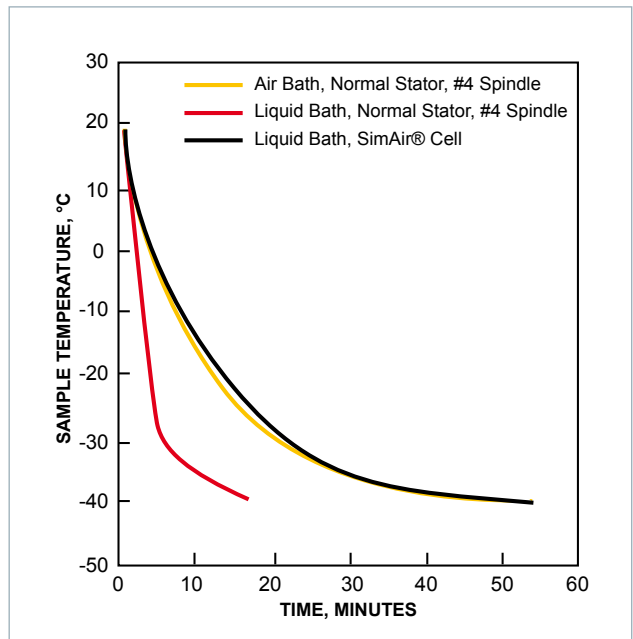
- Simulates the cooling rate of an air bath
- Liquid bath is held at the desired test temperature
- Each cell is independent and can be added at any time for a complete analysis - no need for grouping samples unless desired
- Improved precision, rapid turn-around time and ease of analysis

The SimAir® test cell, when used in conjunction with a suitable liquid bath, accurately simulates the characteristics of an air bath conforming to the cooling rates in Annex 2 of ASTM D2983 and IP 267 Method A.

The SimAir® test cell containing the sample is immersed in a liquid bath that has stabilised at the temperature required for final analysis. Heat transfer through the SimAir® test cell to the sample accurately replicates the cooling influence of an air bath with a cooling rate greater than 60°C/hr (see graph).

The stability of using a liquid bath at a fixed temperature, and not having to rely on a controller to follow an accurate cooling curve leads to more consistent and accurate results.

SUPPLIED WITH: stator, rotor, rotor support and quick connector.



94835-0