



**Thermo Scientific
Sorvall CW2 Plus
Blood Cell Washing
System**



Precise, automated performance for blood cell washing

Thermo Scientific Sorvall CW2 Plus Blood Cell Washing System

This advanced, easy-to-use instrument simplifies work and reduces time required to wash blood cells for antiglobulin reagent tests such as ABO compatibility, Rh testing, cross matching and the Coombs procedure.

Fully Automated for Reproducible Results

Standardized, consistent procedures eliminate the variations that result from manual protocols, so reliable, reproducible results are a matter of routine. Automatic alerts indicate if the saline level is low, and when a run is complete.

Easy, Reliable Operation

The Sorvall® CW2 Plus offers a time-saving wash cycle, easy-to-read digital displays, easy-to-use touchpad controls and standardized, reproducible procedures. Simply insert the sample tubes, select the test parameters, and benefit from reliable results in minutes.

Compact and Durable

The Sorvall CW2 Plus fits neatly on any laboratory bench. Low-maintenance design ensures years of trouble-free use:

- pump tubing is easily changed
- brushless motor
- corrosion free plastic housing

Sorvall CW2 Plus Procedure

Meets AABB Standard

Tube tests for determination of ABO type of red cells and serum	✓
Direct antiglobulin tests	✓
Indirect antiglobulin test for the detection of antibodies to red cell antigens	✓
Saline indirect antiglobulin test	✓
LISS indirect antiglobulin test	✓
PEG indirect antiglobulin test	✓

Our Sorvall CW2 Plus is designed to be used in accordance with The American Association of Blood Banks' guidelines as defined in the most recent edition of the AABB Technical Manual.

Simplifying Every Step in Blood Cell Washing

Manual or Automatic: Flexible Modes to Meet Your Needs

Automatic Mode

Simply load the rotor with tubes and select up to four wash cycles. The microprocessor-controlled Sorvall CW2 Plus automatically does the rest, accurately and reliably.

Manual Mode

The Sorvall CW2 Plus can also be used as an ordinary centrifuge, set to spin for any time up to 999 seconds. Using the agitate button, samples can be agitated for five seconds.



Maximize Antiglobulin Reagent Reactivity

An automatic decanting cycle, with its reproducible speed and angle, consistently removes more saline than even the most skillful hand decanting, leaving a dry cell button. For washing, the rotor allows tubes to swing at a fixed positive angle to sediment cells rapidly at the bottom of the tube. For decanting, the rotor holds tubes at a slightly negative angle and the saline is decanted centrifugally. There is virtually no dilution of the Coombs serum, since red cells form a very high percentage of the final tube volume after saline washing.

Complete Automation for Increased Productivity

The fully automated four-wash cycle takes care of all the necessary steps for precise, thorough cell washing. After the cells are washed, simply add the antiglobulin reagent, centrifuge the samples, and read the results.

Eliminate Cross-Contamination

Nothing but fresh saline enters the tubes. The distributor is mounted directly on top of the rotor, ensuring that all saline dispensed enters the tubes. The unique decanting system removes all wash fluid centrifugally, and the deflector and catch basin prevents saline splash back, minimizing potential aerosol and corrosion problems. This also eliminates the possibility of salt build-up, as the rotor chamber remains dry at all times.

Use Standard Tubes

One distributor handles both 12 x 75 mm or 10 x 75 mm tubes. The integral rotor carries 12 tubes, but can operate with any balanced load of fewer tubes. The rotor also functions as an incubator rack, so if two or more rotors are used, several test lots can be processed at the same time.

Low Saline Detection

The Sorvall CW2 Plus sounds an alarm during the filling step in the wash cycle if the saline supply is low or disrupted, and the system automatically shuts down.

Agitate Cycle

To ensure proper re-suspension of red cell buttons in each tube, the Sorvall CW2 Plus automatically agitates the tubes after each wash cycle. The agitate cycle can also be used manually to improve mixing of red cells with the antiglobulin reagent.

Easily Check System Steps

The Sorvall CW2 Plus is designed to allow interruption of the cycle at any time, so you can check that the system is functioning properly. You can check the fill level and look for good re-suspension, check the packing consistency of cell buttons, and check after the decant step that cells are retained and buttons are dry.

Easy to Clean

After daily use, the catch basin can be easily removed and the rotor and rotating bowl lifted out, allowing easy access to clean the top half of the instrument.

Easy-to-read digital displays for simple, user-friendly operation.





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Specifications	Sorvall CW2 Plus
Maximum speed (rpm)	3,550 at 60 Hz
Fill/decant speed (rpm)	700 at 60 Hz (580 at 50 Hz)
Maximum RCF (x g)	1,200
Decant RCF (x g)	40
Maximum capacity	(12) 12 mm x 75 mm or 10 mm x 75 mm tubes
Operating modes	
Automatic	85 second wash cycle
Manual	High speed for time selected
Check	Stops at end of each step in cycle to enable procedure verification
Controls	
Mode	Selects operating mode (auto or manual)
Cycle	Selects 1, 2, 3 or 4 wash cycles in automatic mode
Time	Selects centrifugation time in manual mode (999 seconds)
Command	Selects operating function: start, stop, check, manual, agitate, alarm on/off, low saline
Drive	2-speed brushless induction motor; dynamic braking in automatic mode
Construction	
Rotor	Polypropylene with replaceable tube holders
Collection bowl	Polypropylene
Certification	CSA certified
Safety and effectiveness	510(k) number BK820020
Dimensions (H x D x W) mm (inches)	627 x 434 x 320 (24.7 x 17.1 x 12.6) lid open 386 x 434 x 320 (15.2 x 17.1 x 12.6) lid closed
Weight kg (lb)	17.8 (39.3) crated 15.4 (34) uncrated

Ordering Information

Catalog Numbers	
Sorvall CW2 Plus (100/120/240V 50Hz)	80300566
Sorvall CW2 Plus (100/120/240V 60Hz)	80300567
Replacement tubing kit	50019
Spare parts kit (includes replacement tubing kit)	50008

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