

BD-46 BLOCK DIGESTOR

LACHAT
INSTRUMENTS
A Hach Company Brand



Performs High Temperature Digestions Quickly and Accurately, without the Mess or Fumes!

Lachat's BD-46 Block Digestor will increase the accuracy, precision and productivity of your high-temperature digestions. Developed to digest total Kjeldahl nitrogen and total phosphorus samples, the BD-46 brings key innovations to this well-accepted block digestion technique:

MAXIMIZES ACCURACY AND PRECISION WITH 46 TUBE POSITIONS

The BD-46 has 46 tube positions rather than the usual 40, allowing calibration standards to be carried through the same digestion process as the samples. You maximize your accuracy and precision by treating the standards and samples exactly the same.

REDUCES FOAMING AND OVERFLOW OF SAMPLES

Many discharge water samples contain surfactants, which may cause the sample to foam and overflow onto the heated block during digestion. The BD-46 digestion tube contains a bulb near the top, which breaks up most foam and reduces overflow.

INCREASES CONTROLLER RELIABILITY AND VISIBILITY

The BD-46 programmable controller is attached to the block on a flexible arm, which keeps it far above spillage. In addition you can easily adjust the controller to convenient viewing angles. Other block digestors have controllers that sit on the bench where they are subject to spillage and are difficult to view.

COLD FINGERS ELIMINATE THE NEED FOR EXPENSIVE ACID SCRUBBERS

Until the BD-46, acid fumes presented serious problems. Analysts were forced to purchase an expensive and often ineffective acid scrubber. Now, by adding an inexpensive glass cold finger to each digestion tube, the acid fumes are cooled, condensed and returned to the tube where they belong. Recovery of acid fumes is nearly 100% for 2 hours of refluxing.

The following table shows complete recovery of sulfuric acid across the block.*

Tube Row	% Acid (v/v)	Std. Dev.	% RSD	% Recovery
1 (front)	4.80	0.02	0.41	99.0
2	4.80	0.01	0.28	99.0
3	4.82	0.01	0.25	99.4
4 (rear)	4.79	0.01	0.25	98.8

*Variability in acid content will affect final results.

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Specifications*

Dimensions (W x D x H)

74 x 35 x 61 cm (29 x 14 x 24 in.)

Electrical

230 Vac, 50/60 Hz, 20A

Temperatures

60 to 390°C (140 to 720°F)

Time Periods

90 minutes for each of the two periods

Set Point Accuracy

±5°C of set point temperature

Set Point Resolution

10°C increments

*Subject to change without notice.

How To Order

- A18208** Block Digestor BD-46, for refluxing digestions
Includes 46-position heating block with integral controller,
two 23-position tube racks,
two 23-position cold finger racks,
tube cooling rack,
48 refluxing tubes, 75 mL
and 48 cold fingers
- 18031** Refluxing Tube, Round Bottom (each), 75 mL, 20 and 50 mL mark, ± 5%
- 18088** Refluxing Tube, Flat Bottom (each), 75 mL, 20 and 50 mL mark, ± 5%
- 18032** Cold Finger (each), for 75-mL Tube
- 18931** Tube Set, Round Bottom Condenser, 75 mL w/ Cold Fingers (48 of each)
- 18932** Tube Set, Round Bottom Condenser, 75 mL w/o Cold Fingers (48 of each)
- 18988** Tube Set, Flat Bottom Condenser, 75 mL w/ Cold Fingers (48 of each)
- 18987** Tube Set, Flat Bottom Condenser, 75 mL w/o Cold Fingers (48 of each)
- 18956** Rack Assembly for Refluxing and Evaporator Tubes, 23-positions
- 18958** Rack Assembly for Cold Fingers, 23-positions



For Technical Assistance, Price Information and Ordering

In the U.S.A.

Call toll-free (800) 247-7613.

Outside the U.S.A.

Contact the LACHAT office or distributor serving you.

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