



## THE WITTERN GROUP

### THE WATER HARDNESS TEST FOR THE NEW MAVEA PURITY C 'SCALE-FREE' WATER FILTER

**IMPORTANT:** To ensure that the heater tank remains scale-free the water hardness at the machine location must be determined, the degree of hardness should be noted and with the aid of the table below the filter cartridge replacement interval can be determined. **Do not use hot water to perform this test.**

1. Slowly fill the measuring tube with cold water from the city water supply intended for the coffee machine to the 5ml mark as indicated
2. Add the orange test solution to the water sample drop-by-drop and mix by shaking the tube. After the first drop the water will normally turn to a purple color. If the water immediately turns yellow, the water is soft.
3. If purple continue to add one drop of the test solution at a time and mixing by shaking until the water changes to a yellow color
4. Count the total number of drops used to turn the water yellow and refer to the charts below to determine the capacity of the cartridge in use. The replacement interval can be determined from this.



| Purity C-50 Cartridge |        |          |           |           |
|-----------------------|--------|----------|-----------|-----------|
| No. of Drops          | fl oz  | 8oz Cups | 10oz Cups | 12oz Cups |
| 1                     | 60,000 | 8,571    | 7,059     | 6,000     |
| 2                     | 52,000 | 7,429    | 6,118     | 5,200     |
| 3                     | 45,000 | 6,429    | 5,294     | 4,500     |
| 4                     | 39,000 | 5,571    | 4,588     | 3,900     |
| 5                     | 34,000 | 4,857    | 4,000     | 3,400     |
| 6                     | 29,000 | 4,143    | 3,412     | 2,900     |
| 7                     | 25,500 | 3,643    | 3,000     | 2,550     |
| 8                     | 22,000 | 3,143    | 2,588     | 2,200     |
| 9                     | 20,500 | 2,929    | 2,412     | 2,050     |
| 10                    | 18,500 | 2,643    | 2,176     | 1,850     |
| 11                    | 1,700  | 243      | 200       | 170       |
| 12                    | 15,500 | 2,214    | 1,824     | 1,550     |
| 13                    | 13,500 | 1,929    | 1,588     | 1,350     |
| 14                    | 12,000 | 1,714    | 1,412     | 1,200     |
| 15                    | 11,500 | 1,643    | 1,353     | 1,150     |
| 16                    | 11,000 | 1,571    | 1,294     | 1,100     |
| 17                    | 10,000 | 1,429    | 1,176     | 1,000     |
| 18                    | 9,500  | 1,357    | 1,118     | 950       |
| 19                    | 9,000  | 1,286    | 1,059     | 900       |
| 20                    | 8,500  | 1,214    | 1,000     | 850       |

| Purity C-150 Cartridge |         |          |           |           |
|------------------------|---------|----------|-----------|-----------|
| No. of Drops           | fl oz   | 8oz Cups | 10oz Cups | 12oz Cups |
| 1                      | 168,000 | 24,000   | 19,765    | 16,800    |
| 2                      | 148,000 | 21,143   | 17,412    | 14,800    |
| 3                      | 130,000 | 18,571   | 15,294    | 13,000    |
| 4                      | 115,000 | 16,429   | 13,529    | 11,500    |
| 5                      | 100,000 | 14,286   | 11,765    | 10,000    |
| 6                      | 88,000  | 12,571   | 10,353    | 8,800     |
| 7                      | 75,000  | 10,714   | 8,824     | 7,500     |
| 8                      | 64,500  | 9,214    | 7,588     | 6,450     |
| 9                      | 57,500  | 8,214    | 6,765     | 5,750     |
| 10                     | 51,000  | 7,286    | 6,000     | 5,100     |
| 11                     | 47,500  | 6,786    | 5,588     | 4,750     |
| 12                     | 44,000  | 6,286    | 5,176     | 4,400     |
| 13                     | 40,500  | 5,786    | 4,765     | 4,050     |
| 14                     | 37,000  | 5,286    | 4,353     | 3,700     |
| 15                     | 34,000  | 4,857    | 4,000     | 3,400     |
| 16                     | 32,000  | 4,571    | 3,765     | 3,200     |
| 17                     | 30,500  | 4,357    | 3,588     | 3,050     |
| 18                     | 29,000  | 4,143    | 3,412     | 2,900     |
| 19                     | 27,000  | 3,857    | 3,176     | 2,700     |
| 20                     | 25,500  | 3,643    | 3,000     | 2,550     |

Examples:

**Purity C-50 cartridge** - It took 6 drops, therefore the cartridge capacity will be approximately 29,000 fl oz, equivalent to 4,143 x 8oz cups; at 200 cups/week, the cartridge will need replacing every 20 weeks.

**Purity C-150 Cartridge** – Given the same 6 drops & 200 x 8oz cups/wk as the above example, the cartridge will need replacing every year (**the cartridge should be replaced at least once a year!**).

Note: The chart capacities are intended as a guide only.