ENERGY STAR®

Qualifying Criteria for Bottled Water Coolers

Version 1.1 – May 2004

1) DEFINITIONS

A. Bottled Water Cooler
A freestanding device that consumes energy and dispenses water from removable 15–19-litre (4–5 gallon) plastic bottles commonly positioned on top of the unit.

B. Compartment-Type Bottled Water Cooler
A bottled water cooler that, in addition to the primary function of cooling and dispensing potable water, includes a refrigerated compartment with or without provisions for making ice.

C. Standby Energy Consumption
The required energy to maintain cold and/or hot water at appropriate dispensing temperatures.

2) QUALIFYING PRODUCTS

For the purposes of ENERGY STAR, bottled water coolers include the following:

A. Cold Only Bottled Units
These units dispense either cold water only, or both cold and room temperature water.

B. Hot and Cold Bottled Units
These units dispense both hot and cold water. Some units may have a third room-temperature tap. Units have an electric resistance heater and a refrigeration cycle.

C. Cook and Cold Bottled Units
These units dispense both cold and room-temperature water.

3) ENERGY EFFICIENCY SPECIFICATIONS FOR QUALIFYING PRODUCTS

Only those products listed in Section 2 (above) that meet the criteria outlined in Table 1 may qualify as ENERGY STAR. The specifications are based on standby energy consumption.

Table 1
Energy Efficiency Criteria for ENERGY STAR Qualified Bottled Water Coolers

Product Category	Standby Energy Use Under Test Conditions (kWh/day)
Cold-Only and Cook-and-Cold Bottled Units	<= 0.16
Hot-and-Cold Bottled Units	< =1.20

4) TEST CRITERIA

Tests will focus on overall standby losses, and water will not be withdrawn during the testing procedure.

A. Power Measurement
Energy use shall be measured as the total true power (kilowatt hours) consumed in one 24-hour period.

B. Starting Conditions
Before starting the energy measurements, the unit should be at operating conditions, with water temperatures as defined in item F (below).

C. Water Withdrawal
No water may be withdrawn from the unit during the test.

D. Timer Usage
If the unit has an integral automatic timer, the timer can be set to turn off the unit for not more than 10 hours in the 24-hour test period. The unit must operate for the last two hours of the 24-hour test to ensure that it fully warms up or cools down after the shut-off period.

E. Ambient Temperature
Ambient air and water temperature must be 24°C, ±1°C (75°F, ±2°F).

F. Dispensed Water Temperatures
Cold-water temperature shall not exceed 10°C (50°F) and hot water temperature shall be at least 74°C (165°F). These temperatures shall be measured before conducting the standby energy-use test described in this specification when the respective function, compressor or heating element turns on.

G. Cooler Location
The unit must be no more than 15 centimetres (6 inches) from a wall which is at least 2.1-metres (7-feet) high and which extends at least 0.6 metres (2 feet) from each side of the unit.

H. Airflow
Airflow around the unit must be natural; no artificial means of increasing the airflow are permitted. Airflow created by components integral to the unit itself, such as internal fans, is permitted.

I. Compartment Temperature
If the unit being tested is a compartment-type bottled water cooler, during the test there shall be no melting of ice, nor shall the average temperature exceed 8°C (46°F) in the refrigerated compartment.[1]

5) EFFECTIVE DATE

The ENERGY STAR Bottled Water Cooler (Version 1.1) specification is effective immediately.

6) FUTURE SPECIFICATION REVISIONS

ENERGY STAR reserves the right to change the specification should technological and/or market changes affect its usefulness to consumers, industry or the environment. In keeping with current policy, revisions to the specification are arrived at through industry discussions.

[1]ARI Standard 1010-2002, "Self-Contained, Mechanically Refrigerated Drinking-Water Coolers"