

PM: Energy classification and marking of sanitary tapware

SS 820000

Sanitary tapware – Method for determination of energy efficiency of mechanical basin and sink mixing valves

Prepared by:

Advisory group energy classification

This is not an official English version of the PM document. It has been pre-pared in good faith, but is intended only to provide information on the content of the Swedish-language version.

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Goal:

This document is drawn to help clarify and improve the standard SS-820000. Continuous experience from testing laboratories is and will be used to explain and provide a basis for a future revision of the standard. The document must free available on the website for energy labelling.

Material:

- The specification on peanut oil used in the test method is consistent with the brand ZETA peanut oil (jordnötsolja), which are sold the stores within the ICA Group
- The specification of food colouring used in the test method is consistent with the brand Dr. Oetker, which are sold in most parts of the world.
- The specification on Test cloth used in the test method is consistent with the brand Vileda Wettex, model soft & fresh, which is sold in many parts of the world.

One single manual operation:

The term 'one single manual operation' in the standard is related to the handling of the energy saving functions for flow- or temperature settings. This extra manual operation should be designed in such a way that the user notes that the maximum flow is desired (ie not happens with routine) every time the tapware is used.

Examples of currently known operations related to energy saving for flow- or temperate settings:

- Automatic spring-loaded control handle that is activated when the user releases the handle.
- Button to manually be activated to enable the increase in flow / temperature.

Exempel of operations that are not sufficient to give one, on each occasion, consciously operation and thus does not considered as an energy saving.

- A stop which can easily pass through by increasing the manual force if an increased flow/temperature is desired.

Equation or the total energy use:

Factors in the equation for the total energy use are empirically tested.

Detecting of rinsing time

Methods to improve the detection of rinsing time in future developments of a European standard could be.

- Rotating plate with cylinders to be filled with water in the final stage of the rinsing test. The colours of each cylinder can be compared with a colour plate.
- Tracer detectors
- Rinsing of particles with filter

The light conditions shall be as such the illumination at the inspection plate measured conform [2] (SS-EN 12464-1) is over 800 lux and the colour recovery index measured conform [3] (EN 12665) has an RA-value higher than 95. See Figure 1.

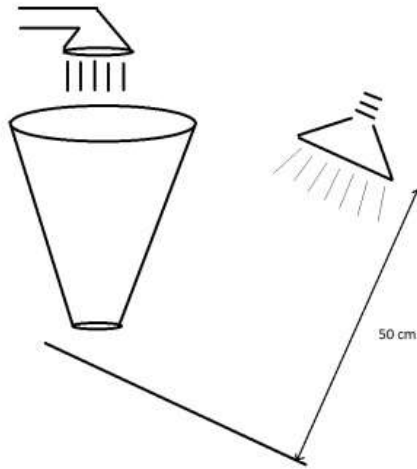


Figure 1. Test set

Determination of the energy use

In the various activities carried out under section 5.4 generally the initial text 'For each activity the controls are placed in the defined position, and released without no further physical contact with the sanitary appliance' is added. In some activities a exact numeric entry for flow or temperature is defined. In these cases, laboratory personnel may use extra actions to meet these requirements. If it is not possible to meet with these exact requirements energy marking of the appliance is not possible.

5.3.4

The testing is repeated 10 times, and the time for each test is noted. Of the 10 measured test times, discard the shortest and the longest, and calculate the rinse time from the remaining 8 values. If, despite this, the relative uncertainty of measurement exceeds 10 %, continue with the test with additional 10 tests as specified in the standard.

Determination of the dry weight of the test cloth

The test cloth should be heated in an oven 30 minutes by a temperature of 100 °C.