

DES – EXPLANATION OF THE RESULTS

IN-DES-T-UK

This document gives information about the interpretation of the DES-controller results

Short product description

The DES-controller is a bio-indicator, containing patches contaminated with test bacteria. The patches are enclosed in a membrane, which is resistant to heat- and chemicals. This membrane is permeable for water, detergent and disinfectant, but prevents the bacteria from being washed off. This is an advantage because to obtain a good test result all bacteria have to be killed.

Enterococcus faecium (ATCC 6057) is used as test-organism. From the non-sporulating bacteria, this micro-organism has the highest heat resistance. *Enterococcus faecium* is worldwide used as an indicator-organism. The DES-controller is divided into four closed compartments. Each compartment contains a patch with a different quantity of test-bacteria; 10^3 , 10^4 , 10^5 and 10^6 . This makes it possible to obtain semi-quantitative results.

The result form

- process information

The test itself is generally performed by the customer. For this reason, the results are only reliable if the test is carried out according to the indications. The process information is copied from information that the customer has filled in.

- results for each start value (10^3 , 10^4 , 10^5 and 10^6)

For each start value the result can be positive or negative. A checkmark (✓) indicates that for this start value all test bacteria were killed, a cross (✗) indicates that reduction was insufficient.

- degree of reduction

The degree of reduction is based on the highest start value that the process was able to kill. This is a logarithmic number (10^6 means for example 1- million = 1.000.000)

- shelf life

When the product is not used within the shelf life or returned too late, no result can be given. This is then indicated on the result form.

Interpretation of the result

Generally a degree of reduction of $\geq 10^6$ is used as requirement for processes that have the objective of reducing the amount of micro-organisms (e.g. hospital, food-industry, kitchen). All results which are less are then interpreted as insufficient.

The soil- and stain removal has to be taken into account when interpreting the results. Sufficient soil- and stain removal is a precondition for disinfection.

To determine if the obtained results are within the requirements it is necessary to take the type of laundry into account, the degree of soiling and the requirement of the end product. It is not possible for us to give indications like "good" or "worse". The results must also be evaluated in consistency with the process objectives by the customer.