

Framework for performance testing for industrial and institutional dishwasher detergents

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Content

0. Background

1. Laboratory test

- 1.1 Laboratory requirements to conduct the testing
- 1.2 Testing conditions
- 1.3 Reference product
- 1.4 Reporting information

2. User test

- 2.1 Selection of the test centers
- 2.2 Procedure, dosage and reference product
- 2.3 Method
- 2.4 Evaluation
- 2.5 Reporting information

0. Background

This test protocol serves as a proof to show compliance with the criterion "fitness for use" of the Commission **Decision xxx/EC** establishing EU Ecolabel criteria for industrial and institutional dishwasher detergents.

The test is for products that fall under the scope of the product group "industrial and institutional dishwasher detergents", this means detergents designed to be used by specialised personal in professional dishwashers. Multi-component systems constituted of more than one component used to build-up a complete detergent shall be tested by means of this protocol too.

The intention is that the product shows compliance with the criterion through any of both tests: laboratory test or user test.

1. Laboratory test

The laboratory test may be conducted by an external or internal laboratory fulfilling the requirements in point 1.1. **The test must be conducted with the recommended dosage and at the lowest recommended cleaning temperature and the degree of soiling.**

1.1. Laboratory requirements to conduct the testing.

The manufacturer's test laboratory can be approved to conduct testing to document effectiveness of industrial and institutional laundry detergents if the following additional requirements are met:

- it must be possible for ecolabel organizations to monitor the performance of testing
- the ecolabel organisation must have access to all data on the product
- the samples must be made anonymous for the test laboratory
- performance of the effectiveness test must be described in the quality control system

1.2. Testing conditions:

The test product must be tested under realistic conditions: dishes soiled with spots that are representative for the kind of soiled expected where the product will be used or marketed.

1.3. Reference product.

The reference product may be a product on the market or a generic formulation approved by the competent body. The test product must show efficiency equal to or better than the reference product.

1.4. Reporting information

The applicant shall provide the following information:

- type of spots that are representative for the kind of soiled expected in the areas/sectors where the products will be marketed
- information on the recommended dosage and the lowest recommended cleaning temperature at which the product claims to be effective
- the product's ability to remove soiling from the dishes, cutlery and kitchenware and to dry the dishes, cutlery and kitchenware the effectiveness of other products the detergent shall be used with (eg rinse aids)
- information about the reference product against which the test product has been tested: lowest recommended dosage or dosage used, temperature, date of purchase and date of testing
- documentation confirming the compliance within the laboratory requirements in point 1.1

(link to the excel-sheet)

2. User test

The user test must be conducted in at least 5 test centers or testers randomly selected and must comply with the following points

2.1. Selection of the test centers

Responses must be obtained from at least 5 test centers representing a random selection of customers.

2.2. Procedure, dosage and reference product

- The procedure and dosage must conform to the manufacturer's recommendations.
- The test period must continue for at least 4 weeks with at least 400 test cycles
- The test product must be tested against a reference product. The reference product may be the product normally used by the user.
- The test product must show efficiency equal to or better than the reference product

2.3. Method

Every test center must assess the effectiveness of the product or multi-component system by answering questions related to the following aspects (or similar formulations)

- the product's ability to remove soiling from the dishes, cutlery and kitchenware
- the product's ability to dry the dishes, cutlery and kitchenware
- the respondent's satisfaction with the agreement on customer visits

2.4. Evaluation

The response must be rated on a scale comprising at least three levels, for example, 'insufficiently effective', 'sufficiently effective', 'very effective'. With regard to how satisfied the test center is with visit reporting arrangements, the categories must be 'not satisfied', 'satisfied' and 'very satisfied'.

At least 5 test centres must submit responses. At least 80% must rate the product as sufficiently effective or very effective on all points (see 2.3) and be satisfied or very satisfied with customer visiting arrangements

2.5. Reporting of the information

All raw data from the test must be specified.

The test procedure must be described in detail.

The applicant shall provide the following information:

- The way the test centers were selected, all raw data from the tests and the test procedure
- All reply forms received from the test centers and the overall result on the cleaning and drying performance of the user test specified in a table or a form. The response must be rated in accordance with point 2.4
- Information on how satisfied the test centre is with visit reporting arrangements and the categories rated.

[Link to the excelsheet](#)