

Framework for performance testing for industrial and institutional dishwasher detergents

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0. Background

This test protocol serves as a proof to show compliance with the criterion "Fitness for use" of the Commission Decision 2017/1215 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 performance test can be conducted through a laboratory test or a user test. In addition to the performance test, it is the responsibility of the applicant to ensure that the detergent is safe to use on the intended use. The conditions for both types of test are described in the following sections.

1. Laboratory test

The laboratory test may be conducted by an external or internal laboratory, as long as it fulfils the requirements set out in Section 1.1. The test must be conducted with the recommended dosage and at the lowest recommended cleaning and drying temperature and the degree of soiling.

1.1. Laboratory requirements to conduct the testing.

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

- it must be possible for competent bodies to monitor the performance of testing (e.g. on-site visits to the laboratory)
- the testing should be performed preferentially by laboratories that meet the general requirements of EN ISO 17025 or equivalent
- the EU Ecolabel Competent Body must have access to all data on the product (e.g. technical data sheets)
- whenever possible the samples must be made anonymous for the test laboratory (e.g. product A and product B).
- performance of the effectiveness test as well as the test method must be described in the quality control system

Competent bodies shall preferentially recognise attestations which are issued by bodies accredited in accordance with the relevant harmonised standard for testing and calibration laboratories and verifications by bodies that are accredited in accordance with the relevant harmonised standard for bodies certifying products, processes and services. Accreditation shall be carried out in accordance with Regulation (EC) No 765/2008 of the European Parliament and of the Council

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. Testing conditions must be validated by the corresponding competent body. If appropriate, the soiling for testing dishwasher detergents can be used. .

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 to the competent body:

- 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 (e.g. 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 section 1.1

2. User test

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

2.1. Selection of the test centres

Responses must be obtained from at least 5 test centres representing a 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 (or 400 ranks in a tunnel washer)
- The test product must be tested against a reference product. The reference product may be the product normally used by the user. Different reference products may be used at the test centres
- The test product must show efficiency equal to or better than the reference product

2.3. Method

Every test centre 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

Test centres must provide an assessment of the effectiveness of the test product, rated on a scale comprising at least three levels, for example, 'insufficiently effective', 'sufficiently effective', 'very effective'. With regard to how satisfied the test centre is with visit reporting arrangements, the categories must be 'not satisfied', 'satisfied' and 'very satisfied'.

At least 5 test centres must submit responses. 100% of the 5 test centres must rate the product as sufficiently effective or very effective on all points (see section 2.3) and be satisfied or very satisfied with customer visiting arrangements

2.5. Reporting of the information

The report shall include all raw data from the tests, the test procedure described in detail as well as the following information:

- The way the test centres were selected. A description of the sampling method chosen and how it was performed,
- All raw data from the tests and the test procedure
- All reply forms received from the test centres 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 section 2.4
- Information on how satisfied the test centre is with customer visiting arrangements and the categories rated.

Annex 1: Example

A template for reporting the description of the procedures and the results of the tests is available [here](http://ec.europa.eu/environment/ecolabel/documents/iidd.xlsx) (<http://ec.europa.eu/environment/ecolabel/documents/iidd.xlsx>). This template is not mandatory to show compliance with criterion 6 Fitness for use.