

Appendix 5 Laboratory test

This appendix outlines the framework for a laboratory test designed to evaluate the efficacy of industrial cleaning and degreasing agents. Alternative tests may be used, provided they are well-documented, thoroughly described, and approved by Nordic Ecolabelling prior to testing.

Laboratory test

The test product, reference product, and water must be tested using the same method, temperature, and soil type relevant to the product's area of application.

The test must be performed with at least five replicates for both the test product, the reference product, and water.

The results should demonstrate that the test product's efficacy is equal to or better than the reference product it is compared with, as well as better than water.

Reference product

The reference product should be an established product already on the market, designed for the same applications as the product being tested.

Dosage

The test must be conducted using the lowest recommended dosage for normal dirt, applicable to both the test product and the reference product.

Dirt

The dirt used must be relevant to the product's intended area of application.

Surfaces

The surfaces used for testing must be relevant to the intended area of application for which the product is marketed.

Performing the test

The test must be performed with at least five replicates for the test product, the reference product, and water.

Relevant contamination is applied to the test surface prior to applying the test product, reference product, and water.

Duration of the test

The duration of the test should be selected from one of the following options:

1. The time specified by the manufacturer in relation to the dosage. The product's efficacy is assessed after the manufacturer-recommended time has elapsed.

or

2. The efficacy of the product is assessed at regular intervals (e.g., after 1, 3, 5, 7 minutes, etc.). It should be recorded whether the test product performs as well as or better than the reference product throughout the test. When either the test product or the reference product demonstrates the desired effect, the assessment and corresponding time (in minutes) should be noted.

Assessment of product

After completing the test, the efficacy of the test product should be compared to that of the reference product and water. The assessment can be based on visual or instrumental measurements (e.g., reflection or gravimetric).

If the test product is found to be less effective than the reference product after the designated assessment period (e.g., after a specified number of minutes), it should be considered "less effective than the reference product" and thus not satisfactory.

If an alternative evaluation method is more suitable for the product than continuous assessment or evaluation after a specific duration, it may be used. The rationale for selecting this method should be clearly explained, and the method must be described in detail.

Information about the product

Product name:	
Manufacturer:	
Product type and area of use:	
Product category (tick the box):	
Water-based products	<input type="checkbox"/>
CIP, component cleaning agents	<input type="checkbox"/>
Solvent-based products (ready-to-use)	<input type="checkbox"/>
Graffiti removers	<input type="checkbox"/>
Cleaners for solar modules	<input type="checkbox"/>

Test conditions

Description of the test conditions applied during the evaluation of the product's efficacy.

Test method:	<input type="checkbox"/> As described in this appendix. <input type="checkbox"/> Other method. Specify:
Performing the test:	Describe how the test is performed:
Reference product	
Name:	
Area of application:	
Lowest recommended dosage:	
Time:	<input type="checkbox"/> Recommended by producer: _____ minutes <input type="checkbox"/> Ongoing
Test product:	
Area of application:	
Lowest recommended dosage:	
Time:	<input type="checkbox"/> Recommended by producer: _____ minutes <input type="checkbox"/> Ongoing
Dirt (description):	
Test surface:	

Test results

Description of the method used to evaluate the product's efficacy.

Assessment method:	<input type="checkbox"/> As described in this appendix. <input type="checkbox"/> Other method. Specify:	
Time:	Product was assessed after: <input type="checkbox"/> _____ minutes (time recommended by manufacturer) <input type="checkbox"/> _____ minutes (number of minutes when test or reference product exhibit the desired effect).	
Is the test product considered more effective than water in all evaluations?	Yes	No

Assessment – visual:					
Conducted tests (parallels):	1	2	3	4	5
Not effective / not satisfactory (not as good as the reference product)					
Sufficiently effective / sufficiently satisfactory (as good as the reference product)					
Very effective / very satisfactory (better than the reference product)					
Other comments to the assessment of the products:					

Assessment according to another method (specified above):
Assessment of the test product:
<input type="checkbox"/> Not effective / not satisfactory (not as good as the reference product)
<input type="checkbox"/> Sufficiently effective / sufficiently satisfactory (as good as the reference product)
<input type="checkbox"/> Very effective / very satisfactory (better than the reference product)
<input type="checkbox"/> Other assessment – specify:

Details of the test laboratory

Place and date	Company name
Responsible person	Signature of responsible person
Telephone	Email