

## THE LABYRINTH OF ALL-PURPOSE CLEANING DETERGENTS

### We have tested All-Purpose Cleaning Detergents: are they useful at all?

The Association of Conscious Consumers has lab-tested All-Purpose Cleaning Detergents. The results and experiences suggest that consumers are not being sufficiently informed about this product type, also, the market shows an unregulated variety of all-purpose cleaning agents – which casts considerable doubt on the product type itself. An all-purpose cleaning agent is basically an extra plastic bottle in your household, however, the detergent itself is not very efficient when it comes to cleaning the house. If you still feel like you need this product, we definitely recommend detergents with an authentic eco-label so that you reduce the health and environmental impacts to minimal.

**We don't even know what we are talking about – so what shall we expect from an all-purpose cleaning agent?**

The Association of Conscious Consumers tests the performance of the different household chemicals used in Hungarian homes. Check out our [washing powder](#), [laundry detergent](#) and [dishwashing liquid](#) tests, which we have done so far.

Taking a look at household detergents, we have examined all-purpose cleaning products this time. For the test, we have purchased products that are sold in stores under the name “all-purpose cleaning detergent”. No kitchen or bathroom cleaners were included in the test, and so we assumed that we were looking at a single product family.

First of all, which products can be called “all-purpose cleaning detergents” and what can they be used for? The concept of the “all-purpose cleaning detergents” is mentioned in the Detergents Regulation (EC) No 648/2004, but the text does not go into detail:

*“Laundry Detergents” and “Cleaning Agents” means any substance or mixture containing soap and / or other surfactants and intended for washing and cleaning processes. Detergents can come in a variety of forms (liquid, powder, paste, rods, cubes, other molds, etc.) that are marketed or used for household, public, or industrial purposes.*

...

*“Cleaning mixture” means the product was made as a household all-purpose cleaning agent and / or other means of cleaning surfaces (e.g. materials, products, machinery, mechanical appliances, means of transport and related equipment, tools, installations, etc.);*

All in all, we can say that all-purpose cleaning products are made for general household use, that is, they have no specific use. In other words, we do not expect any special ability from all-purpose cleaning products – only that they are able to remove household or everyday dirt. Which leads us to our next question: what is household dirt? Since there is no legal definition for household dirt, let's just use our common sense again: household dirt is any dirt that does not originate in the kitchen or bathroom – given that we use special cleaning products for cleaning those rooms. There is one more clue to rely on: what the manufacturer recommends about where and how to use the product (guess what: often no recommendation at all).

However, there is a special case when all-purpose cleaning products are subject to stricter regulations and requirements, and that is, if they hold the EU Ecolabel. Eco-labelled all-purpose cleaners are supposed to be able to remove greasy dirt.

### What does the EU Ecolabel tell consumers?

The EU Ecolabel is awarded to products and services, of which main environmental impacts are reduced in comparison to similar products on the market. To qualify for the EU Ecolabel, products have to comply with a tough set of criteria. This takes the whole product life cycle into account – including but not limited to production, packaging and waste management. Fitness-for-use criteria are set for product categories. Products applying for the label are evaluated by independent institutes. The suitability for use of these products is tested by the manufacturers themselves in independent laboratories or according to a pre-defined method, and the relevant documentation must be submitted to the eco-label certification process.

In the case of all-purpose cleaners, the legislation provides for a laboratory “test method” to determine suitability for use, in which stubborn greasy soils must be removed with the agent with at least minimal efficiency.

In the absence of other guidelines, in our test, we built the process on these requirements, i.e. the effectiveness of the agents was determined by the efficiency of fat removal.

### The labels of all-purpose cleaning products: a disaster

For the test, **we purchased a total of 23 products** – 14 of them in plastic bottles and 9 air pump bottles – which are available in the largest stores and drugstores.

Our first important experience was that product labelling is a **disaster**, and when it comes to informing customers on the web shop, the situation is even worse. When purchasing the products, we acted as ordinary customers: we bought agents that are sold as “all-purpose cleaning products”. We purchased most of the products in a web shop where in most cases there was less information on the product (i.e. what the product can be used for) compared to the labels we learned about later.

**In most cases the label says “general”, which actually means not giving any specific information on what the product should be used for.** In fact, stubborn dirt or grime are not well-defined things either. In total, we found 12 products which had specific label information about the type of dirt they could remove; the types of dirt are: “grease”, “lime scale”, “rust”, “water stain”, “soap residue”, “dust”. The rest of the 11 products did not have any specific information (“universal”, “general”, “household”, “versatile”, “other”). The fact that greasy soils are mentioned on the labels of a relatively large number of products (9 products) actually helps testing, even though one of those labels is in German (“Fett & Schmutz”) only. In those cases, when the terms “stubborn” or “any kind of dirt” were included, we also expected the product to be able to remove grease. By the way, the phrase “any kind of dirt” was indicated on the labels in English only.

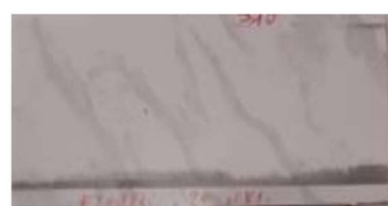
## Which detergents can be expected to cope with grease?

The selection criteria for our laboratory efficacy study were the following: **products with an Ecolabel (for the ecolabel, fat removal effect is required) and products with “grease” or “stubborn dirt” mentioned on the label.** Of the 23 products purchased for the test, we decided not to include 2 of them because, although they were listed as all-purpose cleaning detergents in the store, when we looked at their label carefully, we saw that the instructions suggested to use them for specific purposes. Then we decided to exclude 4 more products, whose labels did not refer to remove greasy stains nor did they have the EU Ecolabel. So eventually we evaluated 17 products all together – 5 air pumps and 12 plastic bottles. Their prices are in a wide range, between 300 and 13000 HUF per litre (0,8-36 EUR).

## How did we do the test?

There is an internationally recognized protocol for testing the effectiveness of all-purpose cleaning products; we found the guidelines in the Ecolabel criteria mentioned, and then we contacted and agreed with a laboratory to adapt the methodology and do the test. **During the test process**, fat-dust soil – imitating “stubborn dirt” – is burnt onto a smooth surface.

The artificial fat-dust soil used in the test consists of: 75% peanut oil, 23% kaolin (clay-like mineral), 2% black dye (soot). After stirring the materials thoroughly, the mixture is put to age for 2 weeks in a place without influence of light. The diluted soil is sprayed with an airbrush or in screen printing in an even layer onto a floor tile. Prior to soiling, the tiles must be wiped with alcohol and then rubbed dry. The soil is burnt on at 100 °C, over 24h in the circulating-air drying cabinet. The scrubbing process was done by an Erichsen Gardner type 494 machine with a load of 300 g. The 7x10 cm sponge was pipetted with 10 ml (undiluted) of the detergent and the tiles were evaluated after 20 strokes (1 stroke = one to-and-from movement). The evaluation was carried out by 3 experienced persons in an independent assessment, with no knowledge of the respective product. To determine the effectiveness of each product, the size of the cleaned surface was compared to the surface of the contaminated tile in %, thus forming the ranking of the agents in the test. The pictures below show the different degrees of cleanliness of the tiles.

**0 %****45 %****100 %**

## Results of the test

An important part of the laboratory test was to determine the pH of the surface cleaners, i.e. the degree of acidity-alkalinity. Without this piece of information, the results referring to the efficiency/performance of the products cannot be interpreted. The experience was that **most of the acidic agents did not clean the greasy tile, while most of the alkaline agents were successful.** It is worth mentioning Amway, however, the only product in the test that has proven to be efficient in spite

of being an acidic agent. Conclusion is that the products should definitely be divided into two groups – based on their pH.

In other words, if you are looking for a product with fat removal ability ensured, opt for an alkaline cleaner. If the product contains vinegar or the ability to dissolve scale is explicitly mentioned – than you have an acidic detergent. If you can see soap on the list of ingredients, the agent is most probably alkaline.

Three cheap own-brand products, **Denkmit**, **Domol** and **Tesco** all-purpose cleaning products, have achieved 100% efficiency in the fat removal efficiency test and they provide specific information, that is fat removal effect, on the label. These are followed by the EU ecolabelled product **Green emotion** with 98% efficiency, but unfortunately information on the label is given in Hungarian only. **Mr Proper's** all-purpose cleaning detergent came out with a very good, 80% efficiency, but unfortunately, when it comes to informing customers, it is not among the top products. Next on the list are **Frosch Lavender Cleanser** and **Seventh Generation General Cleansing Spray**, two ecolabelled products, with medium efficiency and in a medium price range. The former holds a label providing the consumers with satisfactory information, the latter not really. Aldi's own-brand, **Tandil**, has also achieved acceptable results in terms of cleaning performance, it is affordable and the instructions on the label are detailed. **Forever Aloe's** and **Amway's** all-purpose cleaning products are weak at coping with grease and expensive; they are available from MLM systems.



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	Product name	PH	EU Ecolabel	Stain removal promise on the product label	Fat removal efficiency (lab)
	Denkmit Limettenzauber all purpose cleaner	alkaline		"stubborn stain"	100 %
	domol Spring Freshness all purpose cleaner	alkaline		"dirt and greasy stain"	100 %
	Tesco Go for Expert Soda Power universal cleaner	alkaline		"grease and stain"	100 %
	Green emotion eco universal cleaning spray with pine and eucalyptus oil	alkaline		"universal"	98 %
	Mr Proper Lemon all purpose cleaner	alkaline		"general"	80 %
	AlmaWin eco household cleaning concentrate	alkaline		"household"	45 %
	Frosch lavender all purpose cleaner	alkaline		"grease and stain"	40 %
	Seventh generation Free and Clear general cleaning spray	alkaline		"general"	30 %
	Tandil Multi Power cleaner	alkaline		"greasy and stubborn stain"	25 %
	Forever Aloe MPD 2X	alkaline		"surface and greasy stain"	5 %
	Amway Home LOC universal cleaner	acidic		"general"	5 %
	W5 Eco cleaner with vinegar	acidic		"limescale, water stain, soap"	
	Zöldlomb Ph Neutral Eco all purpose cleaner	acidic		"greasy and other stain"	
	Ecover all purpose cleaner lemon	acidic		"Fett & Schmutz"	
	domol cleaner w vinegar	acidic		"water stain, limescale, grease, soap residue"	
	Cycle all purpose cleaner lavender	acidic		"stubborn stain"	
	Ajax general cleaning spray	acidic		"any kind of dirt"	

### This is what the Conscious Consumers recommend you to do

The Association of Conscious Consumers encourages you to: first of all, if you are just about to buy a product, think about what you need it for, and then, check out the label carefully and do not buy any product without clear description or instructions. You might not be buying the right product for the purpose.

**Based on our own personal experience and the test detailed above, we do not recommend using all-purpose cleaning products. We believe that all-purpose cleaning detergents are unnecessary chemicals in the household. Also, they increase the amount of packaging waste generated in the household.** If we stick to the commercially available cleaning agents, we only recommend using products with an authentic eco-label (for any type). These are the ones, and the only ones, that minimize the harmful environmental impact.

### A few tips to avoid all-purpose cleaning detergents

Use special agents, green alternatives and chemical-free means to clean your home:

- use window cleaners for cleaning the windows / green tip: vinegar
- in the kitchen, use kitchen cleaner or cold degreaser / green tip: baking soda
- in the bathroom, use lime scale remover / green tip: vinegar or citric acid
- to wipe off the dust, use a feather broom, cloths and vacuum cleaner,
- to mop-up, use warm water.

[The Conscious Consumers App](#) helps you to get the best household chemicals. Join our [Clean Home EcoTeams program](#) and go green in your household!



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