



INTERNATIONAL FEDERATION
FOR HOME ECONOMICS



IFHE Programme Committee
Household Technology & Sustainability –
the experts in household management

Best Practice FAQs in Machine Laundering[©]

Frequently Asked Questions (FAQs):

Question: What happens during washing?

Answer: A wash cycle consists of two main phases.

- The wash phase:

In the first phase, dirt is loosened from the textile's surface and dissolved in water, partly as "micelles" (dirt surrounded by surfactants). The majority of the dirt is then removed by discharging the dirty water.

- The rinse phase:

In the second phase, dirt is further removed from the textiles during several rinse cycles. This is done by adding clean water, then mixing and discharging the mixture.

Question: What ingredients are in detergents?

Answer: The main substances in detergents are surfactants (for removing dirt), complexing agents (for conditioning the water to enhance the efficiency of the surfactants) and bleaching agents (for oxidising and removing coloured spots left in the fibres).

Depending on the intended use of the detergent, several other substances may also be found.

Question: Will any detergent residues remain in laundry after washing?

Answer: Even though the rinsing of textiles is highly efficient, rinsing cannot guarantee 100% removal of the detergent.

Detergent manufacturers are therefore very careful not to include substances with a potential for provoking skin irritations or allergic reactions.

Question: Is there any guarantee that laundry chemicals will not cause allergic reactions?

Answer: The most common reasons for allergic reactions from detergents or fabric softeners are the perfumes.

In industrial laundries, perfumes are rarely used. However, if they are used, manufacturers pay attention not to use perfumes that are known for its potential to provoke allergic reactions.

Question: Are laundry detergents toxic to the environment?

Answer: Surfactants are toxic to aquatic organisms due to its chemical nature. It is therefore crucial that these substances are "readily degradable" and so that it degrades rapidly in wastewater treatment plants.

This has been a major concern for manufacturers of detergents for professional laundries for many years. The EU legislation on detergents was created to address this concern by requiring that surfactants in laundry detergents are readily degradable.

Question: Are all detergent type suitable for wool and silk?

Answer: No. For delicate fabrics such as wool and silk, please use special detergents. Its pH neutral and enzyme-free composition is best suited to preserve the fibers.

Question: What does the "Woolmark" sign on the package mean?

Answer: These products are suitable for washing wool: Please always follow the manufacturer's care label inside the garment.

Question: Are optical brightener included in all light duty and color detergents?

Answer: Only in special detergents for light and/or delicate colors. All other detergents are free of optical brighteners and usually contain a special color guard instead.

Question: When washing with low water consumption: will the detergent be completely rinsed out of the laundry?

Answer: Yes, because today's washing machines program sequences are modified so that a good washing and rinsing performance can be achieved even with low water consumption.

Question: How do I avoid light stripes on black jeans or other dark fabrics?

Answer: Do following:

- Invert the garments.
- Use gentle wash program and select the low spin speed (max. 600/min).
- Load the washing machine with a maximum of 2.5 kg in weight.
- Use a liquid detergent.

Question: How can I avoid textile fibers from becoming damaged during the washing cycle?

Answer: By following the washing instructions attached to the laundry garments. Generally it is always good to wash at low temperatures and use a short wash program. When there are no particularly hard or dried stains it is sufficient to use light duty products at low temperatures.

Question: Is liquid detergent better or worse than powder detergent?

Answer: Liquid detergents are often easier to use. It dissolves faster in the water and so it does not leave any detergent residues on the clothes.

Question: Where can I find more background information on laundry washing?

Answer: Look for example at: <http://washing-excellence.org/>

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