## The little book of laundry

A hausnet.ch guide

# Correct laundry care for fabrics and the environment



Kindly supported by



SCHULTHESS

## Correct laundry care for fabrics and the environment

#### Do you have a favourite garment?

If so, this fabric care guide is just the thing for you.

We have compiled lots of important washing and care tips to help you achieve the best possible washing results every time.

But we will also demonstrate how a carefully selected washing machine and the right dryer, coupled with proper handling of those appliances, can protect the environment and save you money.

So as you wash and care for your laundry, you can also do your bit for the environment.

Follow these tips and your favourite items and the rest of your laundry will bring you joy for many years to come.

We hope you will have lots of fun reading and browsing this guide.

Your hausnet guide team

www.hausnet.ch



A hausnet.ch guide kindly supported by Schulthess Maschinen AG

#### Contents

1. The history of laundry	4
2. Washing – a complex process	6
3. Water hardness is important	7
4. Modern washing machines	8
5. Modern dryers	10
6. Quality check for purchasing	11
7. Think about care when you buy	12
8. Stain guide	14
9. Care symbols	20



SCHULTHESS

# 1. Washing laundry – an unusual history

Humans have probably washed laundry since time immemorial. Yet the methods have changed radically in the 4,500-odd years of recorded washing history. From cold to hot water, to various washing additives and all the way to the fully automatic washing machine. Good news for modern man – at least in the First World.

Put the laundry in, select the programme, press start and the washing process begins by itself: automatically, effortlessly and in an instant.

That's how easy it is today – but until the last century, washing laundry was extremely hard work. Pounding, beating, rubbing, wringing – what modern washing machines do by themselves automatically today used to take a huge amount of time and effort over many centuries.

100 years ago it was still customary to soak the laundry for up to 24 hours, then boil it in large

kettles and wash it laboriously by hand, usually with a washboard. For lack of running water, the laundry would often have to be carried to the stream for rinsing.

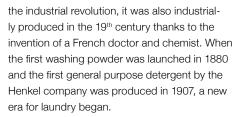
Soap was expensive, so sodium bicarbonate (baking soda) was generally used for laundry. But this "detergent" was bad for the hands and caused severe leaching, because laundry would take about two days a week for a medium-sized family. To prevent heavy soiling, the laundry was laid on the grass and moistened with water for bleaching.

#### Detergents

Soda was even used by the ancient Egyptians as a detergent. Strictly speaking it was the Egyptians' slaves who were responsible for washing. Wall paintings show serfs beating the laundry with clubs or pounding it with their bare feet. The first documented recipe for soap was written down by the Sumerians around 2500 BC. But soap was not used by the Egyptians for washing laundry, only for cosmetic purposes. The Romans used a mixture of water and wood ash for washing, which had a high alkali content and was therefore a powerful detergent. Just like the Celts, they also used urine as a

detergent and only turned to soap later on.

In the centuries that followed, there was virtually no change in laundry technique. This even included the fact that washing was a man's business until the 18th century. It was only in the middle of that century that women, mostly young widows, took over the physically demanding work. As demand for soap constantly increased during



#### Technological progress

Technology found its way into Swiss laundries from 1904, when the first washing machine (by Schulthess) was manufactured.

This was the start of a new age, as the progressively developed electric washing machine took on an ever increasing proportion of the laundry and relieved people of the arduous work.

Around 1920, manual agitator blade/beating cross machines with small gear mechanisms entered the market. This meant less work on the

washboard, though the laundry still had to be beaten. The invention of the immersion heater in 1930 made it possible to heat large amounts of water in a short time. This was followed in 1946 by the development of the first washing machine in the USA.

In 1951, Schulthess developed the first household washing machines for Europe in Switzerland.

In the 1970s, washing machines became standard in individual homes and shared dwellings. So washing at the touch of a button has only been a matter of course for the last 50 years or so.

#### Power to the people!

The development of today's household appliances such as washing machines is closely related to the establishment of the electricity supply. Yet the first hydroelectric power stations built at the turn of the 20<sup>th</sup> century with their supply networks were only sufficient to power arc lamps and light bulbs. The price of electricity was considerable and easily exceeded the hourly wage of a skilled worker for a kilowatt hour (for example, this amount of energy could be used to watch television for seven hours or vacuum for 25 minutes today).



## 2. Washing - a complex process

Although we wash at the touch of a button with washing machines today, the washing process itself is still a highly complex affair.

A good washing process requires mechanical motion to break up the dirt and remove it from the fabric. The mechanism and chemicals also need enough time to achieve their full effect.

The first step in the washing process involves moistening the fibres and dirt. The active substances in the detergent lower the surface tension of the water. As the dirt is removed from the fibre, washing alkali loosen the fabric and highly active enzymes break down tough protein and starch stains. Fruit, wine, tea and coffee stains are removed using stain removers or bleach. Active oxygen ensures that the laundry is hygienically clean, eliminating germs and microbes even at low wash temperatures. Optical brighteners make whites look even whiter. At the same time, a special dirt suspension system keeps the dirt in the detergent and prevents it from depositing itself back onto the laundry.

Finally, all of the dirt is rinsed away with the water.

The perfume contained in the detergent is then released, giving the laundry a pleasant fragrance.

A perfect washing result is achieved.

## To protect the environment when you wash, follow these hints:

Dose the detergent precisely.

Overdosing will not make the laundry cleaner but it will pollute the environment more. Use too little detergent and the laundry will not be properly cleaned, while limescale residues may also form in the washing machine.

 To dose correctly you must take the water hardness where you live into consideration.

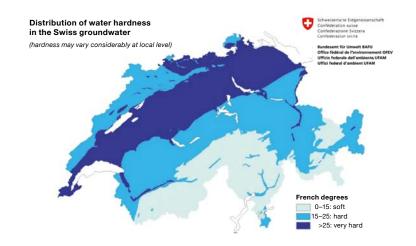
You can ask your water supplier or local authority about this. Also read the detergent manufacturer's instructions on the pack.



### 3. Water hardness is IMPORTANT

For water hardness levels of 25 °F (=French degrees) or 14 °dH (=German degrees) or above, a water softener is recommended.

If you use liquid detergent, it is better to use liquid water softener too.



	soft water	medium-hard water	hard water
French degrees (°F)	0 – 15°F	15 – 25°F	> 25°F
German degrees (°dH)	0 - 8°dH	8 – 14°dH	> 14°dH

## 4. Modern washing machines

Modern washing machines are little technical marvels.

They can wash even at 20°, have special programmes for all modern fabrics, they are quiet and energy-efficient and make ironing afterwards easier or even unnecessary.

When it comes to choosing your own washing machine, qualities like these are not just interesting labour-saving features; they are also a good way to save money and take care of the environment thanks to their low energy consumption and economical detergent use.

Look out for the "Swissmade" label when you buy. That way you will not only be sure of good quality but also of washing concepts designed to our hygiene standards.

Quality machines carry the A+++ energy efficiency label. This high level of energy efficiency is important because most of the power in a washing machine is used to heat the water. An A+++ machine uses a particularly small amount of energy.

## Five favourite programmes at the touch of a button

Like a good friend who keeps our preferences in mind, a Schulthess machine automatically detects the five programmes most frequently selected by its user and stores them individually. Using the "myTop5" programme button, the most frequently used programmes can be accessed in a single step. This helpful feature is exclusive to Schulthess!

Some important questions when choosing a new machine:

- What type and amount of laundry (shirts, blouses etc.) needs to be washed (family, sportswear)?
- How much time is available for washing?
- How important is the choice of express and additional programmes such as impregnation, nappies, sportswear, 20° temperature etc.



## Important features of a good washing machine:

- Energy efficiency: energy consumption, water consumption, spin effectiveness class
- Adjustable spin rotations up to 1,600/1,800 revolutions per minute (reduces drying time)
- Fast express programmes for all temperatures 20° 95°
- Fastest Swiss wash programmes (2 heater elements)
- Allergy programme (e.g. sanaPlus by Schulthess, which removes pollen and mites)
- Other special programmes (wool programme, low temperature 20° C etc.)
- Finish programmes (depending on individual needs)
- Clear control panel with easy programme selection
- Load measuring and detergent dosing display
- Dirt sensor
- 180° door opening angle for convenient loading and unloading
- Choice of door hinge (opening left or right)
- Soundproofing

#### Made in Switzerland

Since 1845. Schulthess has been developing ideas to make everyday laundry care easier for people in Switzerland and all over the world. This pioneering company launched the first manual washing machine in 1904 and Europe's first household washing machine in 1951. With its passionate commitment to quality, innovation and the environment, Schulthess is one of today's leading suppliers of washing machines and dryers for domestic and industrial use. 400 people are now employed at Schulthess Maschinen AG in Wolfhausen in the Zurich highlands. In the last 10 years, more than 90 apprentices have also been trained in a wide variety of fields. In this way, Schulthess helps to consolidate Switzerland's status as a development and manufacturing location. Schulthess products feature great ease of use, fast wash programmes and economical use of water and energy. The company's own development department and state-of-the-art production facilities in Wolfhausen in the Zurich highlands guarantee Swiss quality and robust products with a long life span. A comprehensive service network throughout Switzerland is ensured by a friendly and reliable customer services team of more than a hundred dedicated, friendly and reliable service technicians.



## 5. Modern dryers with heat pump technology

A dryer should be selected just as carefully as a washing machine. Specialist dealers can offer advice to assist your purchase. In general, the capacity of the dryer must match the capacity of the washing machine

Among other things, a good dryer should offer special drying programmes (shirts, outdoor, pillows, wool, programmes for drying in a drying basket) and be time-controlled, as is the case for the Spirit eMotion TW 7340i model by Schulthess.

#### Criteria to consider when purchasing a dryer:

- Energy efficiency
- Sensor-controlled electronic programmes for gentle, energy-saving drying
- · Gentle drum system such as Ecodry in Schulthess models
- · Special programmes for individual and perfect drying
- · High capacity (e.g. 7 kilograms for better

unfolding of the laundry = fewer creases with a spacious drum)

- 180° door opening angle for convenient loading and unloading
- Soundproofing
- · Air recirculation system
- Number of filters (for cleaning after drying
- Automatic self-cleaning condenser
- · Adequate air flow for faster cooling
- · Consistent energy efficiency throughout the
- Choice of door hinge (opening left or right)



Swiss companies like Schulthess Maschinen AG are constantly enhancing their products. For example, the Spirit heat-pump dryers by Schulthess automatically clean themselves after every drying session and rinse the heat exchanger several times

with condensed water. This guarantees consistently high drying performance with stable energy consumption - and no need to clean countless clogged filters. The Schulthess dryers can manage with a single, easily accessible fluff filter that can be cleaned in just one step.

The latest development by Schulthess, the Spirit eMotion TW 7337 PETedition, also has a special, practical feature: with the petPlus programme, animal hairs and allergens are also removed from the laundry during the drying process. Great news for every pet owner.

## 6. Quality check for purchasing the washing machine and dryer

Checklist for purchasing a washing machine

Choose a machine with the best washing effect:

EU Class A+++

Choose a machine with good/high spin effectiveness/speed:

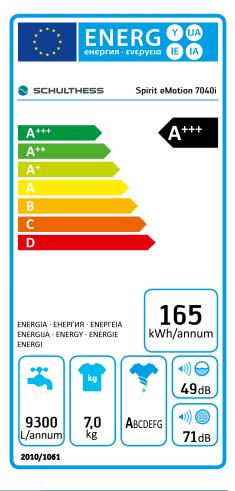
#### **EU Class A**

Also check the quality when you buy a dryer!

Choose a machine with the best energy efficiency:

#### **EU Class A**

Compare the energy consumption in kWh per drying cycle.





## 7. Think about care when you buy

Not every fabric is equally suitable for every use. So even before you buy, think about where and how you aim to use your favourite item in future and how easy it should be to care for:

#### Table linen

- starched white cotton, needs good stain removal for a well-kept restaurant
- dyed cotton for appropriate decoration with high-quality embossing and handling
- dyed polyester/cotton for "easy care" with good dirt and stain removal
- dyed polyester for brilliant colour retention and easiest dirt and stain removal

#### **Bed linen**

- cotton or linen for breathable luxury and comfort in bed
- white cotton for a bright, crease-free and fresh result
- polyester/cotton for easy care
- textured polyester for easy dirt and stain removal, minimal washing costs, durability and permanent flame retardancy

#### Pillows and down

- high-quality natural products make for ideal sleeping conditions but need special care, so only half-load the machine when washing
- when spinning and drying, pay attention to special programmes

#### Hand and bath towels

- soft cotton terrycloth provides comfort
- · heavy terrycloth offers maximum luxury and

- the greatest absorbency
- woven cotton or linen is ideal for use in the kitchen
- white fabric for use by hairdressers and hotels, to allow the best stain removal
- coloured hand towels for a more homelike feel
- dip-dyed hand towels for use at the swimming pool

#### **Curtains**

- washable, printed cotton, polyester/cotton or polyester
- permanently flame-retardant polyester, polyester/cotton or modacrylic for public areas or where fire certification is required
- heavy cotton with thermal lining for heat and sound insulation and extra luxury
- polyester, polyester/cotton or modacrylic for minimal shrinkage and the lowest washing costs

#### Work clothing

- choose white cotton e.g. for chefs and garments with heavy food soiling, to combine good dirt and stain removal with breathable comfort
- polyester/cotton for general, light work clothing, to achieve user-friendly care with good dirt and stain removal

- dyed, flame-retardant cotton for work clothing, e.g. underneath over-gloves or welding aprons
- polyester filaments for work clothing that must not produce fluff or dust

#### Suits

- woollen jackets for warmth and comfort with monthly dry cleaning
- polyester or polyester/cotton for washable shirts, jackets, skirts and trousers that need regular cleaning to remove soiling due to food etc. wool/polyester business suits for monthly dry cleaning, which combine breathable comfort with practical durability in the

## Natural fibre products

office or factory

- Advantages of natural fibres: they allow the skin to breathe, retain their whiteness even after multiple washes, make for warm outerwear and can be treated for flame retardancy
- Disadvantages: the colours fade, more shrinkage than synthetic fibres, slower drying, gradually destroyed by cleaning chemicals, need to be ironed

#### Synthetic fibre products

 Advantages: low wear, little damage by cleaning chemicals, low shrinkage, can be made permanently flame-retardant  Disadvantages: flammable and prone to melting without treatment, easily damaged, e.g. by cigarettes, not as easy to starch

#### Wool

- Wool is a little natural marvel. As an animal fibre it repels water, insulates against cold and heat, is highly elastic and flame-retardant. Conventional wool comes from sheep, though other sources include the fine hairs of the camel, llama, alpaca, cashmere and Angora goat or Angora rabbit
- Always brush wool to the left. Wash by hand at 30–40 °C with a special wool detergent.
   Never use general purpose or colour detergent or fabric softener
- Spread out on dry terrycloth, shape and leave to dry. Never dry wool in the dryer, but refresh it using the wool care programme after drying and you will have beautiful wool, perfectly washed and maintained





## 8. Stain guide

There is a difference between soiling and stains. Whilst dirt occurs in the form of particles on the thread that must be bound and rinsed away, stains involve an actual chemical discolouration of the fibres. For best results, always treat stains immediately.

#### The A-Z of stains

**Beer stains** – Fresh beer stains are easy to treat with lukewarm water and soap. If the stain has dried, spirit or wine vinegar and water will work well. Rub over the stain with a sponge, then rinse and wash with a detergent containing bleach.

**Beetroot stains –** These stains should react to the bleach in all normal detergents (except colour and gentle detergents).

**Blood, ink and rust** – In this case it is best to make your own stain remover. Mix salt with lemon juice and leave the mixture to work on the stain for 10 to 12 minutes. Then carefully rinse with cold water. If the stain is not completely gone, wash with a detergent containing bleach. Dab non-washable clothes with a cloth soaked in alcohol, then soak up any remaining moisture with a piece of blotting paper.

**Candle wax –** Scrape the wax off the surface with a blunt object, then lay blotting paper or



kitchen paper on the fabric and iron over the stain, to draw out the remaining wax. Make sure the iron is on its lowest setting. Dab with a fat solvent, then wash according to the instructions on the care label.

Chewing gum – Chill the fabric as quickly as possible in a plastic bag (e.g. with ice cubes or put it in the freezer) to harden the chewing gum. Most of the gum can then be easily removed. Use a fat solvent to remove the last traces, then wash with your usual detergent.

Chocolate stains – Before treating chocolate with water or a tincture, first try to remove as much as possible with a sharp object (e.g. a knife). Then use borax, which must be rinsed out with warm water at the end. Or: scrape the chocolate off the surface, then rub the stain with a sponge soaked in warm, soapy water. Rinse with cold water and wash as normal.

Coffee and tea stains – First simply rinse out with cold water, especially if the drink contained milk. Then wash as quickly as possible with a detergent containing bleach. For white fabrics and if the stain is extremely stubborn, soak in a solution of detergent containing bleach or try to dab the stain away using 20 % hydrogen peroxide (1 part to 5 parts water), then rinse and wash as normal.

**Curry** – This spice mixture generally contains turmeric, a colourant. You should wash the stain as quickly as possible in a detergent containing bleach. For stubborn stains, use a

detergent containing bleach or soak in a solution of a detergent containing bleach, then rinse thoroughly and wash as normal. Always check for colourfastness before you use peroxide or hypochlorite bleaches. Hypochlorite bleaches should never be used on wool, silk, fire-retardant or easy care finishes.

Fat and oil stains – Curd soap should be used for fat. After rubbing it into the stain, you should leave the curd soap to work for ten minutes and then rinse it off with hot water. Spirit of soap or alcohol combined with soap may also help. Heavy stains should be pre-treated with a detergent containing bleach before washing the clothing at the maximum temperature recommended for that fabric. For non-washable clothing, dust the stain with flour or talcum powder, work it into the stain and brush off.

**Felt-tip and ballpoint pens** – Rub methylated spirits or nail varnish remover into the stain with a sponge, then wash as normal.

Fruit stains – Vinegar or lemon juice may help. Rinse immediately with cold water and then wash with a detergent containing bleach. If the stain has dried in, it can be loosened by soaking in a solution of detergent containing bleach before washing the garment as normal.

**Glue** – Use nail varnish remover or acetone, but check first what the fabric is - do not use nail varnish remover on acetate and triacetate fabrics.

**Glue on fabrics** – If the glue is water-soluble, the stain can usually be removed with a simple machine wash. If the glue is not water-soluble, it may help to use nail varnish remover or cleaning solvent as a pre-treatment.

**Grass stains** – Do not apply water to the stain immediately as that will just make it more stubborn. Gently rub with methylated spirits or lemon juice and rinse with warm, soapy water. Treat stubborn stains by soaking in a detergent containing bleach as for fruit stains. Then wash the clothing with a normal detergent.

**Gravy** – Pre-treat with a detergent containing bleach and then wash as normal.

**Jam –** Fresh stains can often be removed just by washing normally. Old stains should first be soaked in detergent containing bleach and then washed as normal.

**Lipstick on fabrics –** Alcohol is the best way to remove lipstick. Use a tissue or cotton wool soaked in alcohol to dab away the stain.

Make-up – Pre-treat make-up with a detergent containing bleach and then wash as normal



**Mascara** – Soak the item of clothing in a detergent containing bleach, then wash as normal.

**Milk** – Soak the item of clothing in a detergent containing bleach, then wash as normal.

Mould – Mould usually only reacts to washing at high temperatures with a detergent containing bleach. White and colourfast clothing and laundry can be soaked in a 20% hydrogen peroxide solution (1 part to 5 parts water). Always check colourfastness first before using peroxide or hypochlorite bleaches. Hypochlorite bleaches should never be used on wool, silk, fire retardant or easy care finishes.

Mud – It can often be very difficult to remove particularly dark, earthy soiling. In any case, the top layer of the dried stain should be brushed off before washing the item using the amount of detergent recommended for heavy soiling. Use a powerful detergent and select the highest washing temperature permitted according to the item's care label.

Nail varnish – Work from the back of the fabrics: s fabric on the reverse of the stain using a little oil-free nail varnish remover. However, check the fabric first: nail varnish remover should not be used on acetate or triacetate fabrics. Then wash as normal.

**Pollen** – Avoid rubbing with hot water and a towel! First try to knock off and vacuum as much as possible before treating the stain with spirit. Then rinse with warm water.

**Shoe polish** – Spirit of soap, alcohol or turpentine may help with shoe polish stains. Afterwards, wash in the machine. You can also pre-treat the stain with a detergent containing bleach, then wash the clothing as normal.

**Soot marks** – Soot tends not to penetrate deep into the fabric, so don't rub it in! Try knocking it out and brushing it away first. Otherwise it may help to sprinkle the stain with salt and leave it to work before washing in the machine.

**Spray paint** – Wash immediately with cold water, provided that the paint is still damp. If you allow the paint to dry, it will form a skin that cannot be removed.

Tar - Caution, only use this method on strong fabrics: scrape surplus tar from the fabric using a blunt object, pre-treat with a detergent containing bleach - then wash as normal. If this is unsuccessful, a special stain remover should be used

**Tomato sauce** – Soak the item of clothing in a detergent containing bleach then wash using a normal detergent.



**Urine** – Rinse in cold water and then wash immediately. Soak dried-in stains in a detergent solution and then wash as normal. Add a detergent containing bleach for white fabrics with stubborn stains or soak them in a detergent containing bleach before washing as normal.

**Vegetable stains** – You should start by rinsing the stains with clean water, then leave in a borax solution and rinse again.

**Vomit –** Scrape all residue from the surface and rinse well under cold running water. Soak the clothing/laundry in a solution of a detergent containing bleach and then wash as normal.

Wine – Soak up excess liquid with a cloth and then cover the stain with salt. Leave the salt to soak up the wine (around 30 minutes). Then rub the stain with a sponge soaked in a solution of warm water and a detergent containing bleach, finally rinse with cold water and wash as normal.



## 9. Care symbols

SCHULTHESS

Care symbols are voluntary guidance provided by fabric manufacturers. Although care labelling is not legally required, it must comply with the established rules when used.

#### Normal boil wash 95° C

White laundry made of cotton or linen, colourfast dyed and printed: set boil wash programme, only select prewash for heavily soiled fabrics, select special wash programme for stubborn stains, fill drum completely.



#### Gentle boil wash (easy care) 95° C

Easy-care boil wash: reduce load, use a short spin if any to avoid the risk of creases, set 95° C wash programme without prewash, only use prewash for heavily soiled fabrics.



#### Normal coloured wash 60° C

Non-colourfast coloureds, e.g. made of pure or mixed cotton, modal and polyester.



#### Gentle coloured wash 60° C

Easy-care items: reduce load, only fill drum up to 2/3, use a short spin if any to avoid the risk of creases, set 60° C wash programme without prewash, only use prewash for heavily soiled fabrics.



#### Normal coloured wash 40° C

Normal wash e.g. for dark coloureds made of cotton, polyester, mixed fabrics etc.



#### Gentle coloured wash 40° C

Delicates e.g. modal, viscose, acrylic, polyester and polyamide: reduce load, only half-fill the drum, set appropriate wash programme, use a short spin if any to avoid the risk of creases.



#### Delicates 40° C

Wash with particularly delicate mechanical treatment e.g. for wool. Reduce load, only fill drum up to a third, set appropriate wash programme.



#### Delicates 30° C

Wash with particularly delicate mechanical treatment e.g. for wool. Reduce load, only fill drum up to a third, set appropriate wash programme, use a short spin if any to avoid the risk of creases.



#### Hand wash

Only wash by hand at a water temperature of 30 to max. 40° C: dissolve mild detergent thoroughly in water, press the laundry in the detergent and continue to press while rinsing. CAUTION: do not rub, pull or wring items of this kind. Always deal with coloured and delicate items guickly and do not leave them wet.



#### Do not wash

Fabrics are sensitive to wet treatment and must not be washed. However, it must still be possible to perform a short wet treatment as part of dry cleaning because otherwise cleaning with solvents usually has limited results. Water-soluble stains (salts, sugar) and those that swell on contact with water (blood, starch) can only be removed by treatment with water.



#### Chlorine bleach permitted

It must be possible to treat the item using cold water mixed with chlorine bleach. Only apply treatments to tea, coffee, wine, fruit, fruit juice, sweat or other natural stains. Take care to mix the bleach as instructed, stir well and place the cold-washed and rinsed fabrics in the solution for 15 to 30 minutes at least once. Then rinse thoroughly and wash according to the care labels.



#### Chlorine bleach not permitted

Do not bleach/chlorinate or treat with diluted or concentrated bleach. Disinfection without damage to the fabric cannot be guaranteed even with hypochlorite bleach.



#### Hot iron

As per "cotton/linen": treat while iron dry, iron shiny or pressure-sensitive items using a cloth or on the back. A steam iron may be used.



## You can find more useful washing tips here:

- The stain guide "Flecken einfach und schonend entfernen" ("Removing stains easily and gently") by Gabriele Lehari offers effective solutions for every problem stain.
- The book "Flecken kein Problem. Natürlich waschen, pflegen und reinigen" ("Stains? No problem. Natural washing, care and cleaning") by Ute Frangenberg will also give you tips and tricks for stain removal.
- · At Schulthess Maschinen AG you can find out all about new washing machines and dryers and get information about services.

Links: www.schulthess.ch www.hausnet.ch www.energie.ch www.energybrain.ch www.sens.ch www.vrwt.ch www.hausinfo.ch www.energieschweiz.ch

Photo sources: www.commons.wikimedia.org (by Wolfgang Sauber) www.schulthess.ch



#### Credits

Concept and idea for the guide: www.hausnet.ch Text: Doris Pascual Layout: kikcom.ch

Copyright: by hausnet.ch and Schulthess Maschinen AG

This guide was produced with the kind support of Schulthess Maschinen AG.



If you have any more questions, please contact us at the following address:

hausnet.ch c/o kik AG Schartenstrasse 26 CH-5430 Wettingen Tel. +41 56 203 25 00 e-mail: info@hausnet.ch Schulthess Maschinen AG Landstrasse 37 CH-8633 Wolfhausen Tel. 0844 880 880

e-mail: info@schulthess.ch