

Regular cleaning and maintenance is of great importance for all Fortelock floor coverings, both from the point of view of appearance and hygiene, but also to extend their lifetimes.

The following recommendations for cleaning and maintaining floor coverings refer to the use of Dr. Schutz products. They are based on many years of experience and reflect cleaning trends. Cleaning costs and cleaning intervals depend on the frequency of operation and degree of dirtiness. Considering the different cleaning conditions, these are only recommendations.

⚠ WARNING!

Preventive measures help prevent dirt from getting on the floor and soiling it. For example, the entrances to buildings catch dirt in so-called cleaning zones. These zones minimize the amount of dirt brought into the building. The recommended size is at least 2-3 steps. This document does not further discuss the preventive measures used in cleaning. If the maximum coefficient of friction is needed, a special anti-slip varnish can be applied to the floor.

1. THE MOST IMPORTANT PRINCIPLES

1. Never **use abrasive discs** and so avoid the risk of damaging the surface.
2. Never **use rubber caps** (for the legs of chairs or other furniture). Use PVC or polyethylene guards instead.
3. **Regular cleaning** is more convenient and effective than occasional deep cleaning.
4. Use **the recommended cleaning agents**.
5. Always **follow the health and safety instructions of the manufacturer** of the cleaning product.
6. For rotary cleaning machines, choose **soft brushes** (bristles <0.25 mm). Machines with equivalent brushes can be used as an alternative. Brushes with hard bristles are not recommended.

7. **Solvents damage** flexible floor coverings. **Wipe up oil stains and other stains as soon as possible**.
8. A substantial amount of all the dirt introduced can be minimized by using cleaning mats in front of the entrance and **cleaning zones** in the lobbies of buildings.
9. For normal cleaning, we recommend **not using any aggressive agents** (e.g. products containing abrasives, alkalis or a large content of organic solvents and degreasers).
10. If you have a **rotary cleaner-dryer**, use it. Use clean water and a pH-neutral agent in a weak solution. To ensure better cleanability, appearance and durability of the flooring, we recommend the products listed below.

2. CLEANING AND MAINTENANCE – INDUSTRY, INDUSTRY ULTRA, LIGHT, XL, INVISIBLE

⚠ [FLOORS WITHOUT A PU PROTECTIVE LAYER]

2.1. CLEANING AFTER INSTALLTION / DEEP CLEANING

A newly laid covering must be thoroughly cleaned before use to remove all traces of manufacturing and assembly impurities. This cleaning requires **Dr. Schutz Basic Cleaner R**, diluted with water in a ratio of 1:5 to 1:10. In case of slight soiling, this concentration can be reduced according to the degree of dirt.

Apply the cleaning solution evenly to the floor and after letting it work for 10 minutes, scrub the entire surface with a single-disc rotary machine with a red brush. Vacuum up the dissolved dirt with a water vacuum cleaner. Thoroughly neutralize the entire surface with clean water until all residues of the cleaning solution are completely removed. When cleaning, avoid the formation of "puddles" and too much standing water on the surface.

For persistent dirt and other deposits, it is advisable to perform this cleaning even during working time. Depending on the degree of loading in the space and the method of performing routine cleaning, it is necessary to perform this step every 6-12 months.

2.2. ROUTINE CLEANING AND TREATMENT

Remove loose dust and dirt with a wet, suitable mop. **Wipe up oil stains and other stains as soon as possible**. Prolonged exposure to oil or other vehicle operating fluids can cause irreversible damage to the tiles.

To remove sticking dirt, use Dr. Schutz **Floor Cleaner R 1000** diluted in a ratio of 1:200 with water and wipe down the surface with your hands or a cleaning machine. Floors heavily soiled by grease and oil or scuffed by carts and trucks (e.g. in warehouses, industrial halls, workshops) should be manually or machine cleaned with the help of Dr. Schutz Basic Cleaner R.

2.3. INTENSIVE CLEANING

If sticking dirt cannot be removed with normal cleaning, it is recommended to carry out intensive cleaning with Dr. Schutz **Basic Cleaner R**. In this case, follow the instructions in the section Cleaning After Installation / Deep cleaning.

2.4. REMOVING STAINS AND GROOVES FROM RUBBER HEELS

Stubborn stains and grooves from rubber heels, which cannot be cleaned with ordinary cleaning methods, can be removed with undiluted Dr. Schutz **Basic Cleaner R** and a microfiber cloth or soft pad. Afterwards wash the cleaned area with clean water. Remove stains as soon as possible, as some types of pigment can migrate into the surface of the floor after a certain time and their removal then becomes difficult or impossible.

⚠ WARNING!

Some types of tires on cars, bicycles or strollers can leave marks on the tiles if left to stand on them for a long time. This is caused by a chemical reaction between the plasticizers used in tire manufacturing and the PVC tiles. **We recommend painting the tiles with Dr. Schutz PU Anticolor Mat, which prevents prints from forming on the floor**.

Animal urine and feces will cause the tiles to fade. Acids in food products such as tomato paste can also cause tiles to fade. Therefore, always remove chemicals and stains as soon as possible.

The stain/reaction looks brown, so it does not become visible in certain colors of floor tiles (dark grey, black, etc.). In general, multi-colored patterned floor coverings are less delicate than plain ones, and muted colors are preferable to bright colors.

We recommend that you consider using a two-component polyurethane sealing finish against coloring and staining, Dr. Schutz **PU Anticolor mat**. Stains from tires, hair dyes and other aggressive chemicals can stain a floor in active use.

Please contact us and we will provide you with more information.

2.5. TIPS TO REMOVE STAINS

Stains from food or grease, chewing gum or rust can be removed with cleaners like Dr. Schutz Universal Stain Remover Elatex. It is a universal product for removing water-soluble and water-insoluble stains. It also acts with active oxygen against color-intensive stains such as red wine, tea, fruit juices, etc. It is good for removing rubber grooves and other grooves from elastic floor coverings.

3. CLEANING AND MAINTENANCE – BUSINESS, PRINT

▲ [FLOORS WITH A PU PROTECTIVE LAYER]

3.1. PU PROTECTIVE LAYER

The current trend of all global manufacturers of floor coverings (PVC, linoleum) is the use of a PU (polyurethane) protective layer. Mainly because it:

- replaces the first treatment of the surface of the floor covering after its application,
- significantly reduces maintenance costs.

During production, a thin film of polyurethane is applied to the surface of the floor covering, which heals microscopic defects that cause surface staining. Dirt does not "fade away" and only with the correct cleaning procedure, i.e. using only cleaning agents suitable for coverings with a PU protective layer (Dr. Schutz PU Cleaner) can the floor covering be kept in excellent condition.

This PU protective layer does not replace cleaning zones when entering the room.

3.2. CLEANING UP AFTER COLLECTION

A newly laid covering must be **thoroughly cleaned before use** in order to remove all production and assembly residue.

For this cleaning, use Dr. Schutz **PU Cleaner** diluted with water in a ratio of 1:10. In case the soiling is mild, this concentration can be reduced according to the degree of soiling. Apply the cleaning solution evenly to the floor and after letting it work for 10 minutes, scrub the entire surface with a single-disc rotary machine with a red brush or red pad. Vacuum up the dissolved dirt with a water vacuum cleaner and thoroughly neutralize the entire surface with clean water until all residues of the cleaning solution are completely removed.

3.3. ROUTINE CLEANING AND TREATMENT

Remove loose dust and dirt by wiping the floor with a damp mop.

To remove sticking dirt, use Dr. Schutz **PU Cleaner** diluted in a ratio of 1:200 with water and wipe the surface by hand with a suitable mop or cleaning machine.

3.4. INTENSIVE CLEANING

If it is not possible to remove sticking dirt with regular cleaning, it is recommended to carry out intermediate cleaning with a solution of Dr. Schutz **PU Cleaner** and water in a concentration that corresponds to the level of soiling of the surface (e.g. 1:50 to 1:100). Clean with the help of a brush or automatic machine (e.g. an automatic machine for washing hard surfaces) or by the spray method. To optimally maintain the integrity of the surface, it is recommended to regularly polish the cleaned surface with a single-disc rotary machine with a white pad or polishing brush.

3.5. DEEP CLEANING

Do deep cleaning when during normal or intensive cleaning it is not possible to remove particularly stubborn dirt and deposits that ruin a good visual appearance.

For basic cleaning, use Dr. Schutz **Basic Cleaner R** in a concentration of up to 1:5 with water. Apply the solution to the floor and after about 10-15 minutes of letting it work, scrub the entire surface intensively with a single-disc rotary machine with a red pad. Vacuum up the dissolved dirt

with a water vacuum cleaner and thoroughly neutralize the entire surface with clean, if possible warm water, until the dirt and residues of the cleaning solution are completely removed (the water is no longer foamy).

3.6. PROACTIVE LONG-TERM PROTECTION / SANITATION

After a longer period of use, but at the latest when the first worn spots start to appear, PU surface treatment should be revived with a Dr. Schutz two-component polyurethane coating, e.g. **PU Protective Layer** or Dr. Schutz **PU Anticolor** (depending on the mechanical and chemical load requirements). These long-term coatings also have a high resistance to disinfectants and chemicals. They must be applied by professionally trained personnel.

In case of extensive wear of the PU treatment applied during manufacture, the PU protective layer will need to be renewed twice. The previous coating must always be allowed to dry sufficiently between individual layers (minimum 2 hours) and both coatings must be applied on the same day. **The varnish acquires full protective properties and can be fully used no earlier than 7 days after its application.**

For using Dr. Schutz Anticolor, follow the manufacturer's instructions.

3.7. REMOVING STAINS AND GROOVES FROM RUBBER HEELS

Stubborn stains and scratches from rubber heels can be removed with undiluted Dr. Schutz PU Cleaner using a cloth or soft white pad. Afterwards wash the area with clean water. Remove stains as soon as possible, as some types of stains migrate into the surface as they age and completely removing them then becomes very difficult or impossible.

▲ WARNING

When using flooring with a PU protective layer, surfaces in contact with the floor in the interiors of buildings must be **safeguarded with suitable protective means** (e.g.: textile mats under the fixed legs of chairs, tables or PET boards under chairs with castors). It is also necessary to pay attention to regular checks of the protective equipment and their regular cleaning.

For routine cleaning, **do not use any aggressive agents** (e.g. regular detergents, products containing abrasives, highly alkaline products with a pH higher than 10, products with a high content of solvents or degreasers).

Coloring products (e.g. hair dyes, coloring disinfectants for wounds, etc.) as well as the migration of plasticizers (e.g. during prolonged contact of an elastic floor with rubber) will cause **irreversible discoloration** of the elastic floor or protective layer (Caution: This does not apply to the polyurethane coating Dr. Schutz PU Anticolor).

If resistance to colorless disinfectants for hands and tools is specifically required in the building, we recommend **carrying out tests** with the specific agents used. A natural change in color is possible and does not mean a change in the quality of the material.

4. CLEANING AND MAINTENANCE – ESD, XL ESD

▲ [ELECTROSTATICALLY CONDUCTIVE TILES]

4.1. Cleaning ESD tiles

For cleaning electrostatically conductive ESD and XL ESD tiles, we recommend using the special cleaning product Dr. Schutz **ESD Floor Cleaner**. It can be used for normal daily cleaning as well as for cleaning after installation. It is used for all electrostatically conductive and antistatic floors. This cleaner excels at binding ordinary dirt as well as cleaning dirt containing grease.

4.2. Regular cleaning

Sweep or vacuum up coarse dirt and dirt with an abrasive effect. Dilute **ESD Floor Cleaner** with water in a ratio of 1:200 (50 ml per 10 liters of water) and wipe down the surface with this solution and a suitable mop, remove abrasive impurities. For a stronger cleaning effect, the product can be used in a stronger concentration and the cleaning can be done with a single-disc machine with a red pad. At the end, vacuum up the dissolved dirt with a water-based vacuum cleaner and wash the surface with a damp mop. For use in cleaning machines, the dilution can be increased to 1:400 (25 ml per 10 liters of water).

5. USE OF DISINFECTANTS AND SURFACE DISINFECTION

In rooms where disinfectants or surface disinfection are used, it is necessary to follow user manual provided by the manufacturer of the product. Above all, the recommended concentration of the disinfectant, user instructions and procedures.

Due to the large number of distributors and disinfectants, it is not possible for Fortemix to test all such agents in terms of their effects on the surface of PVC floor coverings. In general, we recommend the use of disinfection products indicated by the manufacturer as a suitable disinfectant for the surfaces of PVC floor coverings. The use of unsuitable disinfectants may

adversely affect the mechanical-physical properties (discoloration, softening or etching of the surface) of the floor coverings.

Since most disinfectants create a protective film on the surface of the floor covering, soiling can lead to the "preservation" of dirt between individual layers of disinfectants. We therefore recommend you perform a basic cleaning with the product Dr. Schutz **Basic cleaner R** at least once every 3-6 months. It completely removes these old layers of disinfectants, stubborn dirt and other deposits.

6. CHEMICAL RESISTANCE

Vinyl flooring shows above-average resistance to weak acids, diluted acids, alkalis, soaps and solvents. **Diesel and strong acids cause no harm if rinsed off immediately.** However, ketones, chlorinated solvents, acetone and similar solvents must not come into contact with the floor covering. If this happens, the damage can be minimized by immediately rinsing the substance, and the residues of these reagents must have time to evaporate before the surface of the floor covering is allowed to be walked on again.

Vinyl flooring is suitable for use in most areas where chemicals are used and where there is the risk of accidental spills. Careful, some chemicals contain very strong dyes which,

even with short contact, create stains on the floor covering. Where these types of chemicals are used, we recommend using dark vinyl colors to minimize the risk of staining.

Rubber products (mostly dark and colored rubber – rubber wheels, device protectors, shoe soles, etc.) **cause an irreversible change in color when in contact with the walking layer**, which is manifested by yellowing, browning or even blackening of the surface of the flooring in the place of contact with the rubber product. Burning and smoldering objects leave permanent stains on the surface.

TYPE OF CHEMICAL	EFFECT	MEASURES
Aldehydes Esters Halogenated hydrocarbons Ketones	The floor is affected after a few minutes.	Wipe off immediately.
Alcohols Ethers Glocols Hydrocarbons (aromatic and aliphatic) Kerosene Edible oil	After a few days, plasticizers leak out and this is accompanied by shrinkage and embrittlement of the material.	Wipe off immediately.
Weak acids and alkalis	No effect	Wipe off immediately.
Strong alkali	It will damage the gloss and may cause discoloration of some shades.	Dilute and remove.
Strong acids	Prolonged contact may cause discoloration.	Dilute and remove immediately.
Dyes (indicative)	Contact may cause discoloration.	Dilute and remove immediately.

▲ NOTE: Chemical resistance is tested by exposure to a chemical for 24 hours at a room temperature of 21°C, followed by a cold water rinse. Some stains can be removed by sanding with a nylon cube.

7. OTHER ARRANGEMENTS

The texts of the instructions were prepared by the representatives of the above companies, and no guarantee can be assumed by Fortemix, s.r.o. In case of doubt, the instructions of the respective manufacturer or representative of these products are decisive.

When using any means for cleaning and maintaining floor coverings, it is necessary to follow the instructions of the product manufacturer and, if necessary, consult the manufacturer's technical advisers.

8. ACCESSORIES

Cleaners	Description	Packaging
Dr. Schutz Floor Cleaner R 1000	Special cleaning agent for daily cleaning and care of elastic floorings and hard floorings. Based on water-soluble treatment components that do not cause any environmental burden for basic cleaning. Cleans and treats in one go. In the concentrations used, the pH is neutral. It is suitable for use in cleaning machines. Forms a thin protective layer.	10 l, 5 l, 750 ml
Dr. Schutz Basic cleaner R	Designed for general, deep cleaning . Gentle alkaline cleaner for post-installation and basic cleaning with strong dissolving qualities for construction impurities, as well as for old wax residues, treatment agents, self-polishing dispersions and adhesive residues. We recommend using it every 6 to 12 months.	10 l, 5 l, 750 ml
Dr. Schutz PU Cleaner	Cleaning concentrate for cleaning after installation and for routine cleaning of all elastic floorings with production PU/PUR surface treatment .	10 l, 5 l, 750 ml
Dr. Schutz ESD Floor Cleaner	Cleaning concentrate for daily cleaning and also for cleaning after ESD tile installation. Developed for all electrostatically conductive and antistatic floors.	10 l
Dr. Schutz Universal Elatex stain remover	Universal product for removing water-soluble and water-insoluble stains such as coca-cola, fruit juices, ketchup, ballpoint pens, marmalade, red wine, coffee, chocolate, chewing gum, shoe cream, nail polish, asphalt, markers, etc. It is particularly suitable for removing rubber scuffing, heel scuffing, and graffiti and waterproof paints.	200 ml
Dr. Schutz Secura Hard Protective Layer	Polymer dispersion (wax) with metal mesh elements for treating newly installed floorings in buildings or base-cleaning them. The floor will be protected, the adhesion of dirt will be reduced and routine cleaning will be greatly simplified.	10 l, 5 l
Dr. Schutz PU Anticolor mat	Two-component water-based polyurethane coating . Extremely high cross-linking density and thus increased resistance to colored substances, plasticizers and chemicals.	6 l, 1.08 l