## Cleaning and care of Jasba products

Compared to other covering materials, ceramic tiles stand out not only due to excellent design but also with regard to cleaning and care. Above all lasting beauty and easy cleaning as well as high functionality at the same time both in private and in public areas are some of the decisive criteria. All glazed materials are characterized by surfaces offering the best conditions for cleaning without any problems.

When using cleaning agents, pay attention to the instructions for use and the hazard warnings of the respective manufacturer. Understandably, Jasba Mosaik GmbH can not assume liability for any damage resulting from the non-observance of these instructions and warnings. Cleaning agents containing hydrofluoric acid or its compounds (fluorides) must not be used!

## 1.) General cleaning methods

Depending on the kind of soilings and the type and size of the surfaces to be cleaned, one can distinguish 2 cleaning methods in general:

- Machine cleaning (single-disc, scrubbing suction machines or high-pressure cleaners with spray injector)
- Manual cleaning (scrubber, broom, squeegee or cleaning mop)

The manual cleaning method is always advisable where there is only little dirt. In the case of machine cleaning (e.g. of heavily soiled coverings), it is very important to pay attention to a sufficient distance of the nozzle from the covering surface when using a high-pressure cleaner with spray injector in order to avoid the destruction of cement joints.

After the cleaning, the detached dirt must be immediately removed to prevent it from drying onto the surface again.

# 2.) Fundamental information concerning cleaning agents

The cleaning of a tile surface depends both on the surface quality of the tile and the type of soiling. In the case of slip-resistant tiles, for example, specific cleaning requirements have to be met (cf. par.4.b.).

The pH-value is of particular importance at the choice of the appropriate cleaning agent as it reveals whether it is acidic, neutral or alkaline. The scale of the pH-value ranges from 0 (acidic) to 14 (alkaline).

Film-forming cleaning agents should not be used for the care and cleaning of the tiles as they can considerably reduce the slip resistance. This film on the tile surface can also significantly affect the function of the HT coating.

Cleaning agents containing hydrofluoric acid or its compounds (fluorides) must not be used. They attack the ceramic materials even if strongly diluted.

### Manufacturers of cleaning agents

For the various types of cleaning (basic, first or regular cleaning), appropriate cleaning agents are offered by diverse manufacturers, among others:

- Lithofin AG, D-73240 Wendlingen, tel.: (07024) 9403-0 www.lithofin.com
- Patina Fala GmbH, D-85551 Kirchheim b. München, tel.: (089) 9922863-0, www.patina-fala.de
- PCI GmbH, D-86159 Augsburg, tel.: (0821) 5901-0, www.pci-augsburg.eu
- FilaDeutschland Vertriebs GmbH, D-89312 Günzburg, tel.: (08221) 2068314, www.filachim.com

The so-called "RK List" provides an extensive list of tested, suitable and new cleaning agents. It is published by the "Deutsche Gesellschaft für das Badewesen" and is continuously being revised, extended and updated.

#### 3.) Types of cleaning

In principle, one distinguishes the following three types of cleaning: first cleaning, basic cleaning and regular cleaning.

#### a.) First cleaning

The first cleaning is carried out by the tiler immediately after finishing the laying works. The first cleaning serves for the removal of dirt resulting from construction works and of plastic residues of treated joint mortar as well as cement films possibly adherent to the ceramic coverings. Cement films are the residues of hydraulically hardening laying and pointing materials. For appropriate cleaning agents for the first cleaning of your covering, see chapter 4.

## b.) Basic cleaning

Basic cleaning means a particularly careful interim cleaning taking place at certain intervals. The covering is thoroughly cleaned by using special cleaning agents, by prolonged application times and by using brushes.

# c.) Regular cleaning

The continuous regular cleaning – the so-called "daily cleaning" – is necessary at different intervals, depending on the degree of soiling and utilization: weekly, daily and several times a day in the case of very heavily frequented areas. Normally, for the continuous regular cleaning, it is sufficient to sweep, to eliminate the dirt by means of a vacuum cleaner and to wipe the covering with a cleaning product suitable for the respective type and degree of soiling.

Cleaning products containing care agents are not necessary and possibly even problematic in the long term: "sticky" grease, wax and synthetic layers may form on the covering which have a negative influence on the visual, hygienic, non-slip and cleaning properties.

#### 4.) Cleaning recommendations / special recommendations

### a.) Cleaning recommendations

In the following, you will find a list of the most frequent soilings and the products suitable for their elimination. Always pay attention to the instructions for use and

the hazard warnings of the manufacturer of all the cleaning agents. Understandably, we can not assume liability for any damage resulting from the non-observance of these instructions and warnings.

Type of soiling	Type of cleaning agent to be used	Recommended cleaning agents (examples)	Cleaning procedure
Detached dirt			Sweeping or vacuum cleaning
Normal soiling such as dust, street dirt	Neutral cleaning agent (pH-value 6 to 8)	Lithofin (diverse) Fila Cleaner	Apply cleaning solution on the soiled surfaces     Wipe with soft cloth (microfibre)
Cement film, urine scale, calcareous deposits,rust stains, metal abrasion	(Weakly) acidic cleaning agent (pH-value 0 to 5)	Fila Deterdek, Lithofin "KF Zementschleierentferner" (cement film remover), Patina-Fala "Acid-tec Feinsteinzeug Grundreiniger" (basic cleaning agent for porcelain stone- ware), Lithofin "KF Sanitärreiniger" (sanitary cleaning agent)	<ol> <li>Thoroughly prewet covering and joints on cement base</li> <li>Apply cleaning solution and clean with a microfibre mop with short fibres/scrubber</li> <li>Remove the dirty cleaning liquid</li> <li>Rinse the tiles with a lot of water and, if necessary, neutralize them</li> </ol>
Greases, oils, waxes, abrasion of shoes, cosmetics	(Strongly) alkaline cleaning agent (pH-value 9 to 14)	Lithofin "OIL-Ex" Lithofin "LÖSEFIX" Fila PS 87	1. Apply cleaning solution and clean with a microfibre mop with short fibres/scrubber (in case of extreme soiling, use a solvent in addition, if necessary)  2. Remove the dirty cleaning liquid  3. Rinse the tiles with a lot of water (Unglazed ceramics without upgrading or impregnation may possibly present stains which can not be completely removed!)
Rubber marks, pencil strokes	Chemical dissolving by means of cleaning agents not possible	Fila PS 87 PCI "Elofix"	Only mechanical removal by rubbing or brushing (possibly by using a scouring agent in addition)
Tar, bitumen, paint residues, residues from expansion joints and media with synthetic resin additives	Organic solvents	Naphtha, acetone or socalled caustic pastes, Fila PS 87	
Plastic residues of treated joint mortar		Lithofin "KF Zementschleierent- ferner" (cement film remover), Patina-Fala "Acid Tec Feinsteinzeug Grundreiniger" (basic cleaning agent for porcelain stoneware)	See instructions for use of the respective manufacturer

b.) Special recommendation: slip-resistant ceramic coverings / Jasba-SECURA

Jasba Mosaik GmbH offers a wide range of slip-resistant glazed series. These products are "tailor-made" for the use in trade, industry, public areas as well as in wet barefoot zones (such as swimming pools, showers, saunas etc.). Jasba stoneware tiles are particularly suitable for these areas of application exposed to extreme stress thanks to their high resistance to abrasion and to chemical products.

Non-slip properties are attained by micro-rough tile surfaces and by relief-type profiles. Therefore, these tiles require a greater cleaning effort than those with smooth, glazed surfaces.

Slip-resistant surfaces are cleaned best by using machines. Brushing machines, high-pressure or vapour pressure cleaners are suitable for this. The pointing must be matched to the required cleaning.

**Attention**: brushes or pads containing abrasive materials as well as metal brushes must not be used, because they reduce the slip resistance!

The cleaning agent, equipment and procedure must be appropriate for the type of soiling and the area of application. Do not use film-forming cleaning agents.

Residues of cleaning or disinfecting agents make the floor covering slippery – therefore rinse with a lot of water.

For the continuous regular cleaning and the basic cleaning at certain intervals, we recommend the use of alkaline cleaning agents. In the case of soft water, cleaning with an acidic cleaning agent is recommended from time to time (once per week or once per month, depending on the water used and its hardness). Correspondingly, harder water requires the use of acidic cleaning agents more frequently.

## c.) Special recommendation: HT-coated ceramics

HT is a tile coating which is ceramically baked onto the surface. That is why it is absolutely indestructible – a tile life long!

The coating offers three important advantages:

- · it has an antibacterial effect
- · it eliminates unwelcome odours
- it is extremely easy to clean

These effects are based on the principle of the photocatalysis: the catalyst titanium dioxide baked onto the glaze effects a reaction between light, oxygen and air humidity. In this process, activated oxygen forms, which decomposes bacteria, fungi, algae and moss.

HT-coated tile surfaces are hydrophilic. Instead of being repelled, the water spreads to form a thin film which infiltrates the dirt and thus detaches it from the surface.

In indoor areas, the same substances and aids can be used for the cleaning of HT surfaces as for comparable ceramics without HT. However, the dilution of the cleaning agent can be considerably increased, and in this way, the maintenance costs are noticeably reduced while protecting the environment at the same time.

All substances forming a film must be avoided (so-called care or gloss-improving products) as they impair the effectiveness of HT.

The HT coating is also not destroyed in case of using strongly acidic or strongly alkaline cleaning agents.

Further information about the subject of HT is available at www.jasba.de.

d.) Special recommendation: Surfaces which are not resistant to acids/alkalis

Please ensure that alkaline or acid cleaners are not used on items which are not resistant to acids or alkalis. Otherwise, damage to the surface can not be excluded. Please use standard natural cleaning agents instead.

#### 5.) Contact

In case of further questions, please contact your tiler or send an e-mail to our service department at Oetzingen (info@jasba.de).