

IHO*, IKW*

Cleaning Recommendation for Sanitary Fittings

■ Cleaning planning in the public/commercial sector

The range of public/commercial properties stretches from e.g. hospitals and food industry plants to sports facilities, hotels and motorway rest stops – with huge differences in adequate sanitary cleaning, depending on types and amounts of dirt and lime deposits. Cleaning planning is a prerequisite for the choice of suitable cleaning products and methods. Planning should include at least the following points:

- Place of use
- Frequency and depth of cleaning (basic cleaning or routine cleaning)
- Type of fittings (base and surface materials)
- Condition of fittings

■ Surfaces of sanitary fittings

Chrome-nickel coating according to the requirements of German standard DIN EN 248 is the most common surface of sanitary fittings. Further surface materials are

- Stainless steel
- Plastics, including powder and liquid coatings
- Anodized aluminium
- PVD coatings (metallic hard materials)
- Galvanic special surfaces such as gold, aranja

Introduction

In order to meet market requirements regarding design and functionality, modern sanitary fittings are made of highly diverse materials. Therefore, cleaning products and their ingredients must fulfil different conditions for compatibility with the respective materials.

With a view to avoiding damage and complaints, certain criteria need to be considered both in use and subsequent cleaning.

Except for PVD coatings coloured, non-metallic surfaces are generally more sensitive – and especially more scratch-sensitive – than metallic surfaces (1).

For this reason, it is imperative to exactly determine the type of surface to be cleaned and to select cleaning aids accordingly before the start of cleaning activities.

■ Cleaning products and cleaning aids for sanitary fittings

Acids are *essential* ingredients of cleaners, for removing heavy lime deposits. However, in the cleaning of sanitary fittings these basic principles must be followed:

- Only cleaning products may be used that are expressly intended for this field of application.
- No cleaners may be used that contain hydrochloric acid, formic acid or acetic acid, because these acids can

cause considerable damage – unless cleaning products containing these substances are of good material compatibility, according to the IKW Recommendation for the Quality Assessment of Bathroom Cleaners (2).

- Cleaners that contain phosphoric acid cannot be used without limitations, either.
- Cleaners containing chlorine bleaching lye may not be used.
- Mixing of cleaning products is generally not permitted
- The use of cleaning aids and equipment with abrasive effect – particularly of scouring agents, sponge cleaning pads etc that are not specifically suited for this purpose – is excluded
- *Preferably used are cleaning cloths/sponges that bind as few particles as possible. Knitted cloths are better suited than woven cloths.*

■ Cleaning of sanitary fittings

It is imperative to follow the instructions for use by cleaning product manufacturers. In general, the following points must be observed:

- Cleaning must be done in a way that meets real requirements.
 - Dosage and application time must be adapted to the specific needs of the object to be cleaned. In no case must the cleaning product be applied for longer than necessary.
 - Lime deposits can be prevented by regular cleaning.
 - Existing lime deposits can be removed by applying the cleaner directly on the object to be cleaned, where necessary.
 - In spray cleaning the cleaning solution must not be sprayed directly on the fittings but on the cleaning cloth/sponge used in the actual cleaning process. This is because spray mist can penetrate the openings and gaps of fittings and cause damage.
 - Cleaning cloths/sponges should be washed as often and as thoroughly as possible, so that clean cloths/sponges without foreign particles are used. Particles in cleaning cloths/sponges can scratch surfaces and cause damage.
- Cleaning must be followed by sufficient rinsing with clear water, in order to fully remove cleaning product residues.

Important notes:

As a matter of principle, in the sanitary sector the surfaces to be cleaned must be pre wetted so that joints are sufficiently filled with water and product residues (e.g. soap, shower gel) are rinsed off.

Cleaning or use should always be followed by thorough rinsing with water.

In surfaces with existing damage, this damage progresses with the application of cleaning products.

This Recommendation was elaborated in cooperation between FRT (European Cleaning and Hygiene Technology Research Association), IHO (Association of Hygiene and Surface Protection Industries), IKW (German Cosmetic, Toiletry, Perfumery and Detergent Association) and VDMA (German Engineering Federation).

Literature:

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- (2) IKW, SÖFW Journal 129 (2003), 3-2003, pp. 62-70

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**Contact organisations:*
 Industrieverband Hygiene und
 Oberflächenschutz
 für industrielle und institutionelle
 Anwendungen e.V. (IHO)
 Mainzer Landstraße 55
 60329 Frankfurt am Main
 Germany
 Contact: Dr. *Walter Gekeler*
 Email: gekeler@iho.de
 www.iho.de

Industrieverband Körperpflege- und
 Waschmittel e.V. (IKW)
 Mainzer Landstraße 55
 60329 Frankfurt am Main
 Germany
 Contact: Dr. *Bernd Glassl*
 Email: bglassl@ikw.org
 www.ikw.org

Verband Deutscher Maschinen- und
 Anlagenbau e.V. (VDMA)
 Fachverband Armaturen
 Lyoner Straße 18
 60528 Frankfurt am Main
 Germany
 Contact: *Wolfgang Burchard*
 Email: wolfgang.burchard@vdma.org
 www.vdma.org

