



Collection of standards  
for Commercial Dishwashing



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## 1. Cleaning products and wash items

### **German Waste Water Ordinance**

Ordinance on requirements for the discharge of waste water into water bodies

(Abwasserverordnung – AbwV)

The German Waste Water Ordinance concretises the analysis and measurement procedure.

### **ADR**

(Accord européen relatif au transport international des marchandises Dangereuses par Route)

European Agreement on the International Carriage of Dangerous Goods by Road

### **Biocide**

The EU Regulation (EC) No 528/2012, also referred to as EU Biocidal Products Regulation, is a regulation that governs the manufacture, labelling, market circulation and use of biocidal products, which serve to protect people, animals, materials or products against hazardous organisms such as parasites or bacteria.

The proposal was adopted on 22 May 2012 by the European Parliament and the European Council in Brussels and entered into force on 17 July 2012.

### **CLP**

Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006. Application of GHS in Europe

### **Amended CLP**

Regulation (EC) No 1297/2014 to amend Regulation (EC) No 1272/2008 on the classification, labelling and packaging of substances and mixtures for the purposes of its adaptation to technical and scientific progress



## **Regulation on detergents**

Regulation (EC) No 648/2004 on detergents

Governs the requirements for the aerobic, ultimate biodegradability of surfactants in detergents, exemptions for the market circulation of surfactants in detergents where requirements concerning the ultimate aerobic biodegradability, labelling regulations for detergents and information duties of the manufacturer are not satisfied.

## **DIN 10516**

The standard DIN 10516 is associated with Regulation (EC) No 852/2004. It serves as an orientation and is intended to facilitate compliance with satisfactory hygiene conditions for handling foodstuffs. DIN 10516 on "Cleaning and disinfection" is intended as a set of guidelines for satisfying cleaning and disinfection obligations.

## **EU Ecolabel**

Regulation (EC) No 66/2010 on the EU ecolabel

## **GHS**

(Globally Harmonised System of Classification and Labelling of Chemicals (GHS)) United Nations – UN system for the globally standardised classification and labelling of chemical substances and products

## **German Protection against Infection Act**

Act to prevent and fight infectious diseases in humans (Infektionsschutzgesetz – IfSG)

## **German Food Hygiene Regulation**

Regulation on hygiene requirements for the manufacture, handling and market circulation of foodstuffs

(Lebensmittelhygiene-Verordnung – LMHV)



### **Food standards**

- Regulation (EC) No 852/2004 on food hygiene
- Regulation (EC) No 853/2004 with specific hygiene rules for food of animal origin

### **Nordic Swan**

The Nordic ecolabel, also referred to as Nordic Swan or in Scandinavia simply as “The Swan“, is an ecolabel of the Nordic Council of Ministers. It was enacted in 1989 and encompasses 63 product groups. It is the official ecolabel of the Nordic countries. It is a Type-I Ecolabel (ISO 14024), as a statement about the environmental sustainability of products compared with competitor products is issued by independent third parties.

### **REACH**

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), is superseded by CLP

### **VAwS**

German regulation on facilities for the handling of substances hazardous to water

The regulation on facilities for the handling of substances hazardous to water is a legal regulation to protect water bodies from substances hazardous to water.

### **German Detergents and Cleaning Products Act**

The German Cleaning Agents and Detergents Act (WRMG), full title "Act on the environmental compatibility of cleaning agents and detergents", governs the environmentally sustainable composition of cleaning agents and detergents on the German market.



## 2. Wash items

### Consumer goods

The German Consumer Goods Ordinance (BedGgStV) stipulates which materials are permitted for consumer goods and food packaging, and the permitted level of contamination on the body and / or from the packaging in the food.

### GMP

Regulation (EC) No 2023/2006 on good manufacturing practice for materials and articles intended to come into contact with food

### Ceramics

Directive 84/500/EEC on the approximation of the laws of the Member States relating to ceramic articles intended to come into contact with foodstuffs.

The directive defines maximum levels of cadmium and lead that may be transferred from ceramic goods to the food that they come into contact with.

### Plastics

Regulation (EC) No 10/2011 on plastic materials and articles intended to come into contact with foodstuffs

### Food contact

Regulation (EC) No 1935/2004 on materials and articles intended to come into contact with food. The regulation also governs the supply chain and the purity of the plastics.

### German Food and Feed Code

The German Food and Feed Code (LFGB) describes the handling of consumer goods. It encompasses all production and processing stages along the entire food chain and applies



to animal feed and cosmetics, as well as food and consumer goods. Food safety is of paramount importance. The manufacturer, retailer or distributor must guarantee satisfactory quality and traceability of the goods.

### **Metals and alloys**

Resolution CM/Res (2013)/9 on metals and alloys used in food contact materials.

The technical guideline's recommendation includes specific release limits (SRLs) for metal ions that are released from materials in contact with foodstuffs and their analysis methods.

### **DIN EN 631-1 "Gastro-Norm"**

Materials and articles in contact with foodstuffs; catering containers;

Part 1: Dimensions of containers

Gastronorm is a globally harmonised system of measurement, whereby the use of standard sizes enables a simple exchange of catering containers and is used in the catering industry and in commercial kitchens.



### 3. Dosing technology

#### **DIN EN ISO 12100-1**

Safety of machinery – Basic concepts, general design principles – Part 1: Basic terminology, methodology

#### **DIN-VDE 0100**

Series of standards "DIN VDE 0100 – Construction of low-voltage systems"

#### **Low-voltage**

Directive 2014/35/EU on the harmonisation of the laws of the Member States relating to making electrical equipment available on the market that are designed for use within certain voltage limits

#### **DIN EN 60335-1**

Safety of household and similar electrical appliances general requirements

#### **DIN EN 61000-6-1**

Electromagnetic compatibility (EMC) – Part 6-1: Generic standards – Immunity standard for residential, commercial and light-industrial environments

#### **DIN EN 1717**

Protection against pollution of potable water facilities and general requirements of devices to prevent pollution by backflow

#### **DIN 2403**

Identification of pipelines according to the fluid conveyed



## 4. Water treatment

### **DIN 14743**

Water Softeners (cation exchangers) in the drinking water installation

### **DIN/EN 14898**

Water conditioning equipment inside buildings – Active media filters

### **DIN 18879-1**

Decarbonisation systems upstream of large-scale kitchen appliances



## 5. Drinking water

### **DIN EN 61770**

Electric appliances connected to the water mains – Avoidance of retractive suction and failure of hose sets

### **DIN EN 1717**

Protection against pollution of potable water facilities and general requirements of devices to prevent pollution by backflow

### **DIN 1988-100**

Technical Rules for Drinking Water Facilities

– Part 100: Protection of drinking water, drinking water control; DVGW code of practice

### **Directive 98/83/EC on the quality of water intended for human consumption**

Sets standards for drinking water. The purpose is to protect public health from the negative influences of contamination.

### **German Drinking Water Ordinance**

Regulation on the quality of water intended for human consumption  
(Trinkwasserverordnung – TrinkwV)

### **German Water Resources Act**

Act on the regulation of water resources (Wasserhaushaltsgesetz – WHG)



## **6. Fat separators**

### **DIN 4040-100**

Fat separators – Part 100: Requirements for the use of separator systems pursuant to DIN EN 1825-1 and DIN EN 1825-2

### **DIN EN 1825-1**

Fat separators – Part 1: Principles of design, performance and testing, marking and quality control; German version EN 1825-1

### **DIN EN 1825-2**

Grease separators – Part 2: Selection of nominal size, installation, operation and maintenance; German version EN 1825-2



## 7. Technical Directives / Laws

### **DIN EN 13779**

Ventilation of non-residential buildings

This is a standard for the mechanical ventilation and air conditioning of non-residential buildings intended for human habitation.

### **Ecodesign**

Directive 2009/125/EC establishing a framework for the setting of ecodesign requirements for energy-related products

### **EMC**

Directive 2014/30/EU on the harmonisation of the laws of the Member States relating to electromagnetic compatibility

### **Fluorinated greenhouse gases**

Regulation (EC) No 517/2014 on fluorinated greenhouse gases and repealing Regulation (EC) No 842/2006

### **Machines**

Directive 2006/42/EC on machinery and amending Directive 95/16/EC (recast)

### **Low-voltage**

Directive 2014/35/EC on the harmonisation of the laws of the Member States relating to making electrical equipment available on the market that are designed for use within certain voltage limits



### **RED – radio equipment**

Directive 2014/53/EC on the harmonisation of the laws of the Member States relating to making radio equipment available on the market

### **German Product Safety Act**

Act on the provision of products on the market  
(Produktsicherheitsgesetz – ProdSG)

### **RoHS**

Directive 2011/65/EC (RoHs2) on the restriction of the use of certain hazardous substances in electrical and electronic equipment

### **WEEE2**

Directive 2012/19/EC – Directive of the European Parliament and of the Council on waste electrical and electronic equipment

### **Directive VDI 2052**

Air conditioning – Kitchens

This standard provides guidance on air treatment in commercial kitchens and the dimensioning and design of air-conditioning systems. This applies in association with the complete work of DIN EN 13779.

### **DIN EN 16282-1 et seq.**

Equipment for commercial kitchens – Components for ventilation in commercial kitchens – Part 1: General requirements including calculation method



## 8. Cleaning technology

### **DIN 10510**

Commercial dishwashing with multitank conveyor dishwashers  
Hygiene requirements, procedure testing

### **DIN 10511**

Commercial glasswashing with glasswashing machines  
Hygiene requirements, testing

### **DIN 10512**

Commercial dishwashing with single-tank dishwashers  
Hygiene requirements, type testing

### **DIN 10522**

Commercial cleaning of reusable boxes and reusable containers for unpackaged foodstuffs  
Hygiene requirements, testing

### **DIN SPEC 10534**

Commercial dishwashing  
Hygiene requirements, testing

### **DIN EN 50416**

Safety of household and similar electrical appliances  
Special requirements for conveyor dishwashers for commercial use

### **DIN EN 60204-1**

Safety of machinery  
– Electrical equipment of machines – Part 1: General requirements



### **DIN EN 60335-1**

Household and similar electrical appliances Safety – Part 1: General requirements

### **DIN EN 60335-2-58**

Household and similar electrical appliances safety

– Particular requirements for commercial electric dishwashing machines

### **DIN EN IEC 63136 (VDE 0705-136)**

Electric dishwashers for commercial use – Test methods for measuring the performance

### **VDI Directive 6022 Part 1**

“Hygiene requirements for ventilation and air-conditioning systems and units (VDI Ventilation Code of Practice)” describes hygiene requirements for the planning, installation and maintenance of air-conditioning and ventilation systems, as well as technical prerequisites and hygiene knowledge for the maintenance of these systems.



This compendium of practice, which has been drawn up by experts, should remind the reader that commercial machine washing cannot be successfully conducted on a superficial level or without the corresponding input of all persons involved in the cleaning process.

Only the understanding of technical processes, the resulting interrelations and the cooperation of all participants, particularly the dishwasher operator and staff, as well as having regular maintenance of the dishwasher, the dosing equipment and the water treatment system by the manufacturer, can produce the cleaning results expected by the user.

Consistent cooperation between the dishwasher, detergent and dosing equipment manufacturers, as well as the manufacturers of wash items, guarantees constant and optimal adaptation to practical requirements for the benefit of customers and the environment.

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