

**ABIPLA 45**  
Associação Brasileira das Indústrias de Produtos de  
Higiene, Limpeza e Saneantes de Uso Doméstico e  
de Uso Profissional **ANOS**



# GUIDE TO CLEANING PRODUCTS

Concepts, Purposes  
and Functions



**2021**

# INTRODUCTION

The Brazilian Industry Association of Hygiene, Cleaning, and Sanitizing Products for Domestic and Professional Use (ABIPLA) was founded on November 12, 1976 to represent the sector before public agents and to promote debates on competitiveness, innovations, public health, and sustainable consumption. This guide provides information on the correct use of cleaning products as we hope to contribute to advances towards a quality public health for all.

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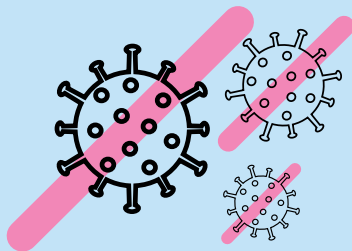
## Table of Contents

WHAT ARE CLEANING AGENTS? .....	04
THE DIFFERENT TYPES OF CLEANING AGENTS .....	06
SANITIZING PRODUCTS AND SAFETY .....	08
HOW CAN I IDENTIFY IF A SANITIZING PRODUCT IS SAFE AT THE TIME OF PURCHASE? .....	09
WHAT TO LOOK FOR ON THE LABEL OF A SANITIZING PRODUCT? .....	10
HOW TO IDENTIFY AN IRREGULAR SANITIZING PRODUCT? .....	11
WHAT ARE THE SAFETY PRECAUTIONS WHEN HANDLING SANITIZING PRODUCTS? .....	12
TECHNICAL GLOSSARY OF SANITIZING PRODUCTS .....	13
TYPES OF SANITIZING PRODUCTS AND TECHNICAL DEFINITIONS .....	15
REFERENCES .....	19

# WHAT ARE CLEANING AGENTS?

Known as sanitizers, these products are used to sanitize, clean, and disinfect environments (homes, offices, stores, hospitals, motor vehicles, laundry rooms, among others) and ease the removal of dirt and grime as well as eliminate germs, fungi, bacteria, and some viruses.

Now that we have defined the concept of cleaning agents, the next step is to know what type of product suits our different needs, whether for cleaning, sanitizing and/or disinfecting surfaces. Without further ado, let's begin.



## Disinfection

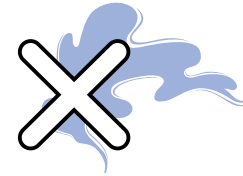
Disinfecting means reducing the amount of microorganisms, such as bacteria, viruses, and fungi after cleaning and/or sanitizing surfaces. Products used for disinfection should reduce the number of bacteria to a level considered safe by public health standards.

Therefore, disinfection is more powerful than sanitation and can kill close to 100% of bacteria, viruses, and fungi while also targeting disease-specific microorganisms such as influenza and coronavirus viruses.



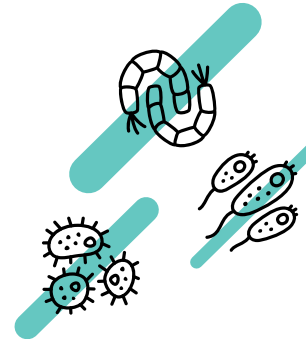
## Disinfestation

Process that kills, inactivates, or repels undesirable organisms such as insects found in different environments, objects, inanimate surfaces, or plants.



## Deodorizing

Process to absorb or eliminate unpleasant odors through antimicrobial activity by inhibiting the growth of microorganisms.



## Sterilization

Thorough eradication of microbes from surfaces, including bacterial spores, bacteria, viruses, and fungi. Health facilities rely heavily on the sterilization of food, medicines, and equipment to prevent wound infections and disease spread from patient to patient.



## Cleaning or Hygiene-Related Activities

Removal of all visible contamination on surfaces such as dirt, spills, food particles, dust etc. This process does not eliminate germs, fungi, bacteria, and some viruses (though it may reduce their number.). E.g., Dishwashing detergent.



## Odorization

Process designed to add perfumed fragrances on objects, surfaces, and environments by releasing substances.



## Sanitization

Process designed to reduce microorganisms (germs, bacteria, and some viruses) to safe levels, according to health regulations. E.g., Liquid bleach.

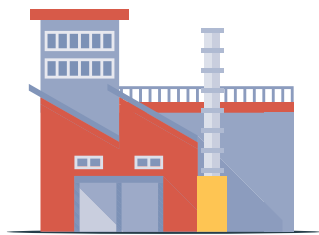
# THE DIFFERENT TYPES OF CLEANING AGENTS

## 01 For Sale and Use



### Home Use Products (freely sold to consumers)

Low-toxicity formulas deemed safe for general use, according to recommendations on the label.



### Professional use products (sale restricted to institutions or specialized companies)

Ready-to-use or concentrated formulas for later dilution or other authorized usage in an appropriate area and by specialized personnel (company responsible for applying the product) immediately before use. Products restricted to professional use.



- Surface cleaners
- Odor neutralizers (deodorizers)
- Room odorants/air fresheners
- Metal polishers
- Pre-wash and post-wash products
- Degreasers
- Soaps and soap-related products

## B ) Products with “Biocide” antimicrobial action – microorganism control in human habitats

### b.1) Nomenclature:

Suffix

**“\_cida”**

products designed to eliminate microorganisms

E.g., bactericide, fungicide, germicide

Suffix

**“\_stático” “anti\_”**

products designed to inhibit the proliferation of microorganisms

E.g., antibacterial, bacteriostatic

Prefix

### b.2) Categories:

- Disinfectants
- Deodorants
- Sterilizers
- Water purifiers
- Sanitizers

## 02 Purposes



### A ) Cleaning agents for general use, dirt removal, and similar purposes

- Bleaches/Whiteners
- Descaling agents
- Detergents
- Chemical Finishing – fabric softeners, polishers, floor wax, ironing products, ironing starches, acidulants, laundry neutralizers



### C ) Disinfestation products – pest control

- Household insecticides
- Insecticides for specialized companies
- Amateur gardening
- Molluscicides
- Rodenticides for home use and for specialized companies
- Repellents

# SANITIZING PRODUCTS AND SAFETY

We must understand ANVISA's role before we can understand some of the definitions behind our products. The National Health Surveillance Agency (ANVISA in the Portuguese acronym) is an agency linked to the Ministry of Health, which prescribes the rules for the manufacture and sale of cleaning products (sanitizers), and monitors whether companies are in compliance with the proper rules and regulations. ANVISA acts to regulate these products prior to commercialization, observing criteria such as quality, efficacy, and safety; the Agency also establishes norms and regulations, monitors occurrences of health-related problems caused by sanitizers, acts to control and assess risks and, when necessary, adopts corrective measures to eliminate, avoid, or minimize the risks related to the use of sanitizers.



While sanitizing products are essential to protect the health of the population, some risks may emerge from their use which is why they are subjected to sanitary regulations by ANVISA. According to different technical characteristics, such as the risks associated with the product or the purpose/ conditions of use, among others, sanitizing products are evaluated and regulated through different procedures to ensure that they are safe for the consumer.

Depending on the hazard risk of the sanitizing product, they may either be sold directly to the consumers, as in low-toxicity formulas deemed safe for use according to the recommendation for use on the label, or sold only to specialized institutions or companies, as in formulas which must be handled by specialized professionals and/or in special places. This information must be clearly shown on the product label.

## How can I identify if a sanitizing product is safe at the time of purchase?

Every duly regulated sanitizing product must contain a label with all relevant information, laid out in a clear and precise manner, so the consumer may use the product with safety and know how to proceed in case of an accident.

In addition to this information, every sanitizing product legally qualified for sale and distribution obtains a certification number from ANVISA, which may be either a "registration number" or "process number", as pictured below.

The difference between "process number" and "registration number" refers to the product certification procedure, which in turn refers to different technical variables, yet both communicate to the consumer that the product is safe for its intended use and that the product manufacturer referred all technical information to the competent authority for certification.



### Notified product:

"Product notified at ANVISA n° XXXXXXXX"

1 – process identification number indicating that the product has been certified

### Registered product:

MS – Ministry of Health

1 – Product class identification as sanitizer

2 – Company Identification to ANVISA

3 – Product identification to ANVISA

4 – Packaging type Identification

# What to look for on the label of a sanitizing product?



**Batch**  
Lote

**Product validity**  
Validade

**Contents**

**Composition**

**Customer Service (SAC in the Portuguese acronym)**

**Emergency service;**

**Toxicology Center information regarding some types of products deemed most hazardous**

**Name of the manufacturer and/or importer, distributor, and CNPJ number (National Registry of Legal Entities)**

**Full address**

**Storage instruction, if applicable. Instructions for use with the heading "Read safety instructions before use" so the consumer is aware of how to safely proceed when using the product**

**Information about the hazards and risks associated with the products, as well as the first steps to take in the event of accident**

**Product notified at Anvisa or registration number at the Ministry of Health**

Operating authorization number    Versions  
**3,0000.0000.000-0**  
 Sanitizers begin with #3    Order of registered products    Check digit

# How to identify an irregular sanitizing product?

bootleg/  
unlicensed

Bootleg or unlicensed products are sold without due certification by ANVISA, i.e., the manufacturer failed to provide the competent authority with technical information regarding efficacy and safety. Such products often use ingredients that are not fit for use or in quantities that can put the consumer's health at risk. These irregular products are usually sold by street vendors, roadside traders, trucks vendors, or door to door salespeople; they may also be found in stores selling general cleaning products, including bulk sale.

These products are commonly offered at a much lower price compared to regular products. The price difference results from the irregular manufacturer not making the necessary investments in product development to ensure efficiency and safety, inefficient and irregular packaging, lack of quality control tests, tax evasion, and lack of investment in technical professionals. Furthermore, these products fail to deliver what they promise in their labeling.

These products, even if used correctly, may damage surfaces or cause health risks for those exposed to the chemicals, among which burns, irritations, intoxications, or other hazardous consequences. Furthermore, the package labeling fails to provide information about where to seek support from the manufacturer "responsible" for the product.



## Signs to look out for when identifying an irregular product at the time of purchase:

- Products sold by vendors in streets, cars, vans, etc.
- Inadequate packaging, such as PET beverage bottles
- Products without expiration date, batch, or invoice
- Crumpled, rusty, stuffed, or torn packaging
- Unglued or unregistered labeling
- Bulk sale: products sold in large volumes transferred to a packaging at the time of purchase.

The safest way to avoid the proliferation of bootleg and/or unlicensed products, which endanger the health of the general population, is to report the product to the competent authority as soon as possible. You may report it directly to the local Health Surveillance Agency in your city or state, or register your complaint online: [www.anvisa.gov.br](http://www.anvisa.gov.br)

Alternatively, you may contact your local Regional Chemistry Council to denounce bootleg products.

The Health Surveillance Agency will investigate your complaint and, if tenable, indict the commercial facility or vendor selling the product, as this seriously endangers public health for all. You may register the report anonymously.



## What are the safety precautions when handling sanitizing products?

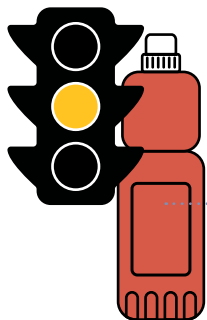
- ⚠ Store sanitizing products away from food, beverages, medicines, and cosmetics;
- ⚠ Store sanitizing products out of reach from children and animals, as they can draw their attention and cause serious accidents;
- ⚠ Do not reuse empty product packaging due to the presence of residues.
- ⚠ Dispose of the product in the appropriate garbage containers collected by the cleaning service in your city;
- ⚠ Dispose of empty packaging appropriately, preferably in a selective collection system (separate from other waste);
- ⚠ Keep sanitizers away from sunlight, rain, moisture, as well as heat and fire as some of them are flammable;
- ⚠ Do not puncture or throw aerosol packs on fire and never point the aerosol or spray at your face;
- ⚠ If you use domestic utensils (cup, glass, or spoon) to measure doses, use them solely for this purpose and always wash after use;
- ⚠ Only mix sanitizing products with any other product if this indication is explicitly mentioned on the label as undue mixing may cause unwanted reactions and/or release toxic vapors.

# TECHNICAL GLOSSARY OF SANITIZING PRODUCTS



## PRODUCT RISK ASSESSMENT ELEMENTS

- I – substance toxicity and concentration in the product;
- II – usage purpose;
- III – conditions of use;
- IV – prior adverse events or technical complaints;
- V – potentially exposed population;
- VI – frequency and duration of exposure; and
- VII - forms of presentation.



## PRODUCT RISK CLASSIFICATION

### Risk 1 Products

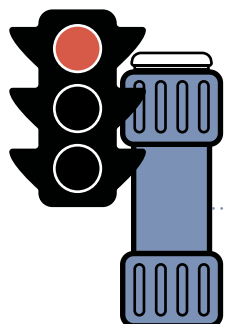
I – oral LD<sub>50</sub> values for rats greater than 2000 mg/kg per unit of body weight for liquid products and greater than 500 mg/kg per unit of body weight for solid products;

II – Pure pH value at a temperature of 25° C (twenty-five degrees Celsius) greater than 2 or less than 11.5;

III – no sign of corrosiveness, antimicrobial activity, disinfectant action, and not based on viable microorganisms; and

IV – the formula does not contain one of the following inorganic acids:

- a) hydrofluoric acid (HF);
- b) nitric acid (HNO<sub>3</sub>);
- c) sulfuric acid (H<sub>2</sub>SO<sub>4</sub>); or
- d) salts that release the aforementioned acids under the conditions of use of the product.



### Risk 2 Products

I - oral LD<sub>50</sub> values for rats greater than 2000 mg/kg per unit of body weight for liquid products and greater than 500 mg/kg per unit of body weight for solid products;

II – pure pH value at a temperature of 25° C (twenty-five degrees Celsius) equal or less than 2 or equal or greater than 11.5;

III – shows sign of corrosiveness, antimicrobial activity, disinfectant action, or based on viable microorganisms; and

IV - the formula contains one of the following inorganic acids:

- a) hydrofluoric acid (HF);
- b) nitric acid (HNO<sub>3</sub>);
- c) sulfuric acid (H<sub>2</sub>SO<sub>4</sub>); or
- d) salts that release the aforementioned acids under the conditions of use of the product.

## TYPES OF SANITIZING PRODUCTS AND TECHNICAL DEFINITIONS



### Gel and liquid alcohol

Sanitizing formulas based on denatured (\*) hydrous or anhydrous ethanol, in the following formats: colloidal solution (gel), liquid, pressurized liquid (aerosol), and moist tissues.

(\*) denatured – ethanol containing additives with a foul taste or odor to prevent its use in beverages, food, or other purposes.



### Chlorine-based bleach

Product designed to whiten/bleach surfaces, fabrics, and other materials by chemical and/or physical processes.



### All-fabric or oxygen bleach

Aqueous solutions based on sodium or calcium hypochlorite, with an active chlorine content between 2.0 to 2.5% w/w, until the expiration date. The product may contain only sodium or calcium hydroxide, sodium or calcium chloride, and sodium or calcium carbonate as a stabilizer. It may serve as bleach or a general-purpose disinfectant.



### Fabric softeners

Products used to reduce harshness in clothes and textile products and consequently impart a desired softness.



### Waxes and sealants products

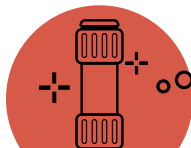
Hydrophobic compounds (do not mix with water) designed to protect surfaces against scratches, dirt, moisture, and friction, sometimes with a shine effect.



### Degreasers

Chemical compounds and formulas essential to several industrial processes, prior to surface finishing or for protective or coating components, in processes generally called degreasing.





### Acid or alkaline descaling agents

Products designed to remove limescale through chemical or physical processes.



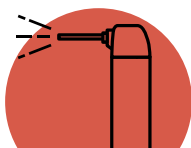
### Specific-use detergent

- Anti-corrosion
- automotive
- degreaser
- furniture cleaner
- floor cleaner
- plastic cleaner
- tire cleaner
- glass cleaner
- dishwasher
- clothes washer
- pre-wash

Products designed for cleaning surfaces and fabrics by reducing surface tension.

These include: Anti-corrosion, automotive, degreaser, furniture, floors, plastics ...

Pre-wash product: product designed for use before washing in order to facilitate the final cleaning.



### Disinfestants

Products designed to eliminate pests, such as rodenticides and insecticides.



### Disinfectants

Formulas that contain microbicidal substances in their composition with a lethal effect on non-sporulated microorganisms and used on non-living surfaces and materials.

These include: All-purpose cleaners, cleaners for the food industry, for swimming pools, for hospital milk depots, for hospital environments, for fixed and hospital surfaces, and for semi-critical items.



### Deodorants

Formulas that contain antimicrobial substances capable of controlling unpleasant odors from microbial metabolisms. They do not have a lethal effect on microorganisms, but can inhibit their growth and multiplication. They can be designed for inanimate surfaces or environments.



### Laundry starches

Products designed to add crispness and structure to fabrics and make ironing easier. Cornstarch is also included in this category.



### Facilitators for ironing clothes

Products designed to ease ironing.



### All-Purpose Cleaners

Products designed for cleaning inanimate surfaces, and may or may not contain surface-active agents.

These include: plastic, aluminum, rubber, shoes, carpets and rugs, leather, furniture, tires, glass, anti-corrosion, air conditioning, and degreaser cleaners.



### Pool cleaners

Algicides – substances or products designed to kill algae

Fungicides - substances or products designed to kill all forms of fungi.



### Odor neutralizers

Products whose formula contains substances capable of neutralizing or eliminating unpleasant odors by physical, chemical, or physicochemical processes, which may or may not leave residual or odorous effects.



### Acid or alkaline waste neutralizers

When used together with another formula, these products render the original capacity of the acid or base (alkaline) inefficient.



### Air fresheners/Deodorizers

Products whose formula contains substances capable of masking unpleasant odors.



### Polishers

Products designed for cleaning, polishing, and protecting surfaces by physical and/or chemical action.

These include: metal polishers, shoe polishers.



### Degreasers

Products designed for removing waxes and grease by means of solvency action.



### Soaps

Products for household washing and cleaning with a formula based on alkaline salts of fatty acids, and may or not be associated with other surface-active agents.



### Soap-related products

Products designed for cleaning, with a formula based on abrasives, and associated or not with soaps and other surface-active agents.



### Rinse aids

Products designed to improve the drying process of dishes, avoiding possible stains and granting them more shine.



### Stain removers

Products designed to remove stains from inanimate surfaces and fabrics.

## References

- LAW N° 6.360/76 - Provides for the Health Surveillance Agency and its responsibility to regulate medications, drugs, pharmaceutical and related supplies, cosmetics, sanitizing products and other related products, as well as other provisions.
- Collegiate Board Resolution (RDC in the Portuguese acronym) 59/2010 - Technical procedures and requirements for notifying and registering sanitizing products.
- RDC 40/2008 - Technical regulation for cleaning products and related products.
- RDC 34/2010 - Technical regulation for sanitizing/disinfectant products.
- RDC 14/2007 - Technical regulation for antimicrobial products.
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- Website: [www.cfq.org.br](http://www.cfq.org.br)
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