

Points for attention for bleach as a cleaning agent and disinfectant

Introduction

Bleach (popularly known as 'Javel' in Belgium) can be used as a cleaning agent and disinfectant solution against Covid-19. It is a simple product to disinfect surfaces that are frequently touched. This includes things like switches, door handles, water taps, telephones, computers, remote controls, etc.

The active ingredient has the scientific name sodium hypochlorite. This substance is diluted with water.

Product	Cleaning	General disinfection	For strong disinfection
Bleach 10° (or 3.6% ac)	6.4 ml per l of tap water	16 ml per l of tap water	32 ml per l of tap water
Chlorine 15°	4 ml per l of tap water (1/250 dilution)	10 ml per l of tap water (1/100 dilution)	20 ml per l of tap water (1/50 dilution)

The advantages of bleach are:

- Easy to obtain – present in every household;
- Inexpensive

However, there are also important points for attention when using this product.

Always read the SDS of the product or the existing safety instruction card before use.

Properties



HAZARDS:

Can be corrosive to metals
Causes severe burns and eye injuries
Very toxic to aquatic organisms, with long-lasting effects

General measures



Always wear safety goggles and disposable gloves when using and diluting bleach.

First Aid

AFTER INGESTING	Rinse your mouth. DO NOT induce vomiting.
CONTACT WITH SKIN	Remove contaminated clothing immediately. Rinse skin with water or take a shower.
CONTACT WITH EYES	Gently rinse eyes with water for several minutes; remove contact lenses, if possible; continue rinsing.
In the event of burns or eye injuries, immediately consult the POISON CONTROL CENTRE/a doctor.	

Points for attention concerning STORAGE

Risk	Measure	Ref. legal framework
BURN WOUNDS	Store products in sealed packaging.	Codes of Good Practice CLP – CODEX Book VI title 1
	Diluted products in bottles, nebuliser, canisters, etc. must be labelled with the name of the contents of the product, diluted or not, and hazard symbols.	
	Keep the products out of the reach of children.	
ENVIRONMENT	Store on drip trays.	Flemish Environmental Permitting Regulations (VLAREM)
	Limit the quantity present: storage quantity < 100 l of product (pure + diluted product). For larger stocks, the distance rules of the VLAREM Annex 5.17.1 must be followed.	
	Do not store acids in the immediate vicinity of the (diluted) bleach.	

Points for attention concerning USE

Bleach is corrosive, i.e. metal can corrode when frequently polished with bleach.
For informational purposes: Don't use microfibre cloths; these will break down.

Risk	Measure	Ref. legal framework
BURN WOUNDS	Ensure good ventilation. Wear your PPE: safety glasses and disposable gloves.	Codes of Good Practice
ELECTRICAL SHORT-CIRCUIT	Do not use on electrical equipment.	
	Do not use on warm surfaces.	
	Always RINSE with cold water.	
CHLORIC GAS FORMATION	NEVER allow it to come into contact with urine (e.g. in toilets) because of the danger of chloric gas formation. Always flush the toilet first.	
	NEVER combine diluted bleach with another cleaning product!	

Points for attention concerning DILUTION

Risk	Measure	Ref. legal framework
IMPROPER USE	Dilution must be done by a trained and competent person. This employee must have knowledge of the dangers and risks. Wear your PPE: safety glasses and disposable gloves.	Well-being at Work
BURN WOUNDS CHLORIC GAS FORMATION	Ensure good ventilation. Wear your PPE: safety glasses and disposable gloves.	Codes of Good Practice
	ALWAYS dilute with cold water. NEVER use lukewarm or hot water! First, pour the cold water into the container and then the measured amount of bleach. Pay attention to the concentration of the product to be diluted (see table above).	
	The diluted solution has a limited shelf life. So just prepare the daily amount.	
	The containers may only be used for diluted bleach solution. It must not contain residues of other products. The smaller containers (bottles, nebuliser, canisters, etc.) must be labelled with the name of the contents of the product, diluted or not, and hazard symbols.	
ENVIRONMENT	The remains and remnants are KGA (small and hazardous waste). The products are collected in a separate storage container and transported to the container park or via the approved waste collector.	Flemish Environmental Permitting Regulations (VLAREM)