

Disinfection with Birchmeier

1 General information

Viruses are mainly transmitted through droplets and then by touching contaminated surfaces and mucous membranes with the hands. Therefore, personal hygienic measures are the first step to avoid infection.

The second step is the disinfection of surfaces which have a high risk of contamination, such as window and door handles, keyboards, touchscreens. After that, other surfaces with a lower risk of contamination can be disinfected as well.

The surfaces have to be completely covered with disinfectant to reach an effective disinfection. The disinfectant can only be effective where there is contact with it.

Quick alcohol-based disinfectants are only effective as long as the surface is wet. The surfaces (or hands) have to remain wet to reach the contact time needed.

Other disinfectants are still effective even when they are dry (please read the data sheet of the disinfectant). It is still necessary to cover the surface completely with disinfectant, but it does not need to remain wet.

Is it sufficient to clean the surfaces?

The following germ reduction can be reached by

- cleaning 10 – 90 %
- disinfecting >99,999 %

Visible dirt or contaminations have to be cleaned off the surface before disinfection.

The blot pictures make the different reductions of germs visible. They show that disinfection is much more effective than cleaning.

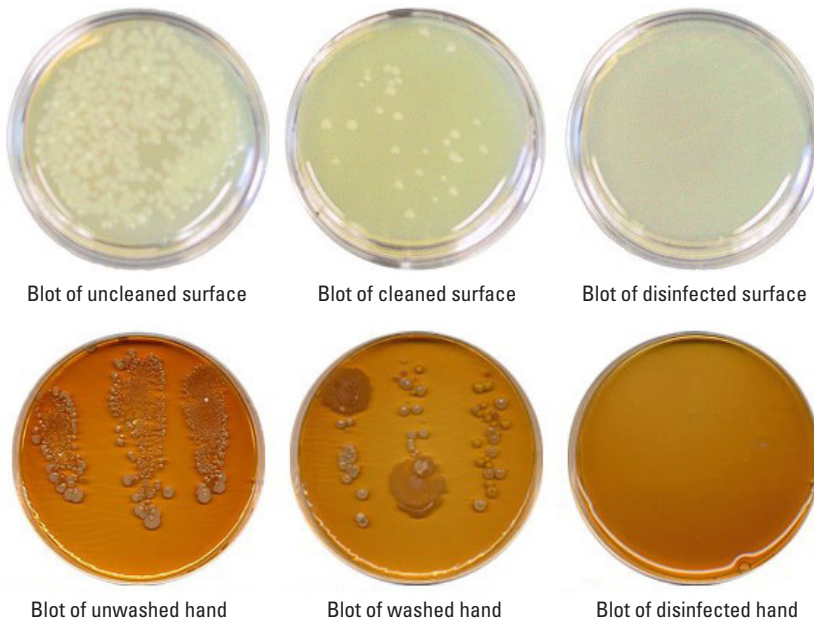


Photo source: orochemie GmbH + Co. KG

2 Hand disinfection and disinfection of small surfaces

For these types of applications, alcohol disinfectants are particularly suitable, because they are effective quickly and are easily available. Hand disinfectants contain special additives, which protect the skin from drying out.

Alcohol-based disinfectants need a minimum contact time of 30 seconds. During this time, the surface has to remain wet.

For this type of application, our hand sprayers **Desinfecta +**, **Foxy Plus**, **Super Star 1.25** and our **industry line** (black, red, blue) are especially suitable.

**Desinfecta +****McProper Plus P****Clean-Matic 1.25 P**

Further products see chart no. 5

It is recommended to wipe the sprayed surface to ensure a complete coverage of the surface. Dirt on the surface has to be cleaned off before disinfection so that viruses cannot protect themselves from the disinfectant.

Never use alcohol disinfectants near an ignition source, such as a burning candle or a switched-on electronic device. Do not use alcohol disinfectants for larger surfaces, because the alcohol fumes cause a risk of fire and the employees are exposed to these alcohol fumes.

3 Disinfection of medium-sized surfaces

For disinfecting medium-sized surfaces, there are disinfectant concentrates which are ready to use by diluting them with water. Particularly noteworthy are agents based on quaternary ammonium compounds, which stand out due to their low toxicity to humans and skin- and material-friendliness. They are also odour-free.

Agents based on chlorine (hypochlorites, javel) or peroxides and peracetic acids can be used for those purposes too. But they are less suitable for working in closed rooms, due to their odour emission.

These disinfectants need a minimum contact time of 1 minute. Some of them are still effective, even when they are already dry. The surface does not need to remain wet. Completely covering the surface is still necessary. Follow the instructions of the manufacturer when using the disinfectant.

For the application on these surfaces, our compression sprayers [Astro 5](#) or [Clean-Matic 5 P](#) of our [industry line](#) (black, red, blue) are especially suitable.

**Astro 5****Clean-Matic 5 P**

For further products see chart no. 5

Do not use alcohol disinfectants for medium-sized surfaces, because the alcohol fumes cause a risk of fire and the employees are exposed to these alcohol fumes.

4 Disinfection of large surfaces and rooms

The same agents are used as for the disinfection of medium-sized surfaces.

For this type of application on plain, large surfaces, our «Accu-Power» line backpack sprayers **REB 15 PC3** and **REC 15 PC4** are especially suitable, but also the manual driven backpack sprayers **RPD 15 PB1** and RPD 15 PB2.

For the disinfection of rooms and areas or surfaces with nooks and crannies, which should not remain wet, the **fine hollow cone nozzle NF 125** from Birchmeier for the **REC 15 (PC4 version)** and the **AS 1200** can be used. The fine droplets and the low throughput allow an even coverage of the surfaces, without soaking them. Therefore, the surfaces can be used again after a short time.

The powerful air support of the AS 1200 facilitates a good coverage from a distance and reaching areas that are difficult to access (luggage rack, areas under the seats, etc.).



REC 15 PC4 with NF 125















REC 15 / AS 1200 with NF 125

For further products see chart no. 5

Do not use alcohol disinfectants for large surfaces, because the alcohol fumes cause a risk of fire, and the employees are exposed to these alcohol fumes.

5 Popular disinfectants and sprayers for their application

Disinfectant (type)		Suitable sprayers		Sprayers with limited suitability
Alcohol based	   	Desinfecta + Foxy Plus Super Star 1.25 Industry line (black, red, blue)		
Quaternary ammonium compounds (watery, odourless)	  	Desinfecta + All McProper Spray-Matic 1.25 special Astro 5 RPD 15 PB1 / PB2 REB 15 PC3 REC 15 PC3 / PC4 AS 1200 with REC 15 and NF 125 All plastic industry sprayers (red, blue)	 	Stainless steel sprayers, black Stainless steel sprayers, red
Peroxides / peracetic acids		Blue line		Red line RPD 15 PB1 / PB2 REB 15 PC3
Hypochlorites (javel) / Chlorine dioxide		Red line RPD 15 PB1 / PB2 REB 15 PC3		Blue line

Follow the instructions of the manufacturer when choosing and using the disinfectant. Do not use alcohol disinfectants for large surfaces (fumes, risk of fire).

For choosing a sprayer, go to the [product selector](#) and click the suitable pictogram at «Chemical resistance»:



You can find your Birchmeier dealer in your area at our [Dealer network](#).