

PLEXIGLAS®

PLEXIGLAS®
for Hygiene Protection



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POLYVANTIS



Contents

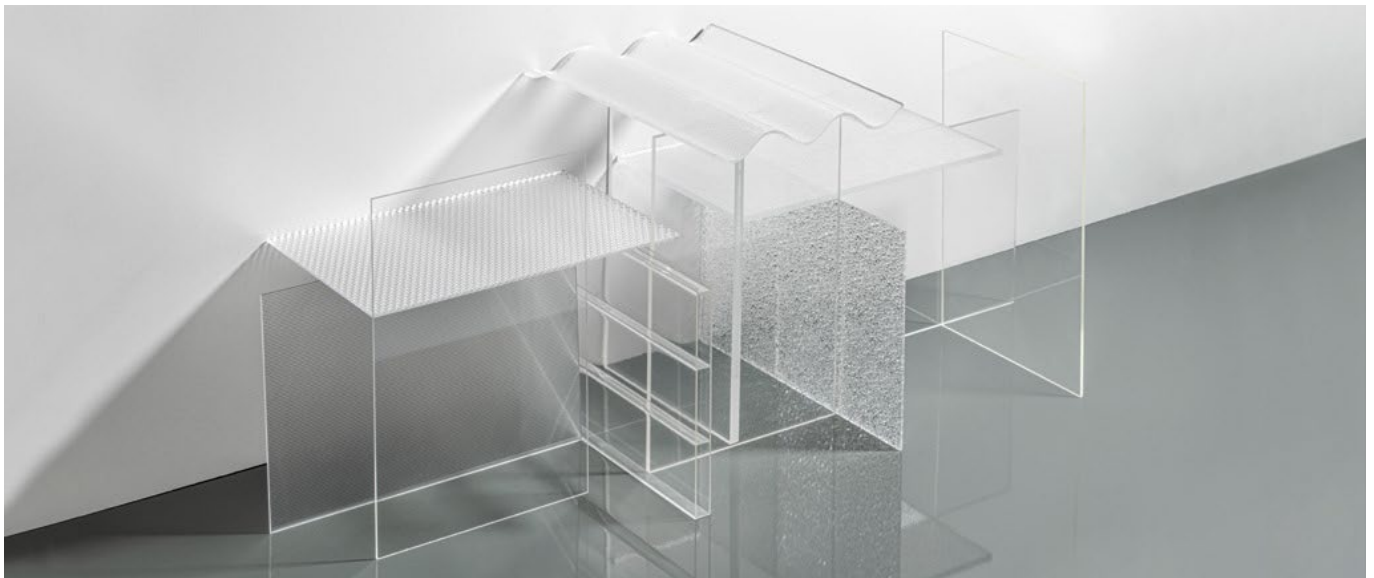
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Discover PLEXIGLAS® – the original!

That is exactly what makes the branded acrylic glass from POLYVANTIS stand out from every other acrylic glass in the world. PLEXIGLAS® is the original, invented in 1933 and still produced today from POLYVANTIS GmbH. With a pioneering spirit, a passion for innovation and decades of experience, this original transparent sheet has evolved into an entire product family.

PLEXIGLAS® is available in satin, dyed and light-scattering variants, for example, as well as with various surfaces and an array of functional properties.

Discover all the possibilities for contemporary and attractive hygiene protection!



Available forms:

- Solid sheets and blocks
- Tubes and rods
- Multi-skin and corrugated sheets
- Films

Ideal properties for custom design:

- High-quality aesthetics
- Outstanding transparency and vibrancy
- Wide variety of colors and surface finishes
- Low weight
- Resistant to breaking
- Easy to process and install
- Durability
- UV resistance
- Large sheet formats available



Everyday hygiene protection

During the coronavirus pandemic, protecting our health has become critical in all areas of public life. Retailers, hotels, restaurants, health centers, schools, public authorities, and offices all had to quickly come up with new hygiene plans to open up again. This is where PLEXIGLAS® – the original acrylic glass from POLYVANTIS – proved itself, as the material which met the need for hygiene protection.

Protection in the workplace

The SARS-CoV-2 occupational health and safety standard in Germany requires a minimum distance of 1.5 meters between every person: employees, colleagues, and customers. Where this is not feasible, the standard requires: “Transparent partitions must be installed in areas with public traffic and, if necessary, also to separate workstations where the minimum distance cannot be maintained.”

Since then, transparent dividers have become incredibly widespread as a see-through barriers and sneeze guards. They protect against droplets that transmit the



■ PLEXIGLAS® GS/XT

■ PLEXIGLAS® Multi-Skin Sheets

■ PLEXIGLAS® Film

SARS-CoV-2 coronavirus, as well as flu and cold viruses or other pathogens.

Hygiene protection remains important in shopfitting

Protecting against infections will continue to be a core focus in the future. According to a June 2020 survey, the majority of pharmacists are considering keeping the transparent protective screen on the counters even after the coronavirus crisis. In light of this, hygiene protection will clearly become an integral part of planning store, catering, and office facilities in the future.

PLEXIGLAS® combines protection with aesthetics

PLEXIGLAS® protective screens ensure the required minimum distance is kept between customers and staff, are almost invisible, and blend seamlessly into the existing store environment.

Transparent solid sheets, multi-skin sheets, and films provide a long-term solution offering clear, color-neutral, and undistorted transparency, even when using daylight

lamps. PLEXIGLAS® can also be fitted with an anti-reflective effect to reduce glare from shop lighting.

PLEXIGLAS® also offers several major benefits over glass: It is highly transparent, unbreakable, and easy to process. It can be used flexibly, as the product's low weight even allows it to be suspended from above.

Hygienic thanks to PLEXIGLAS®

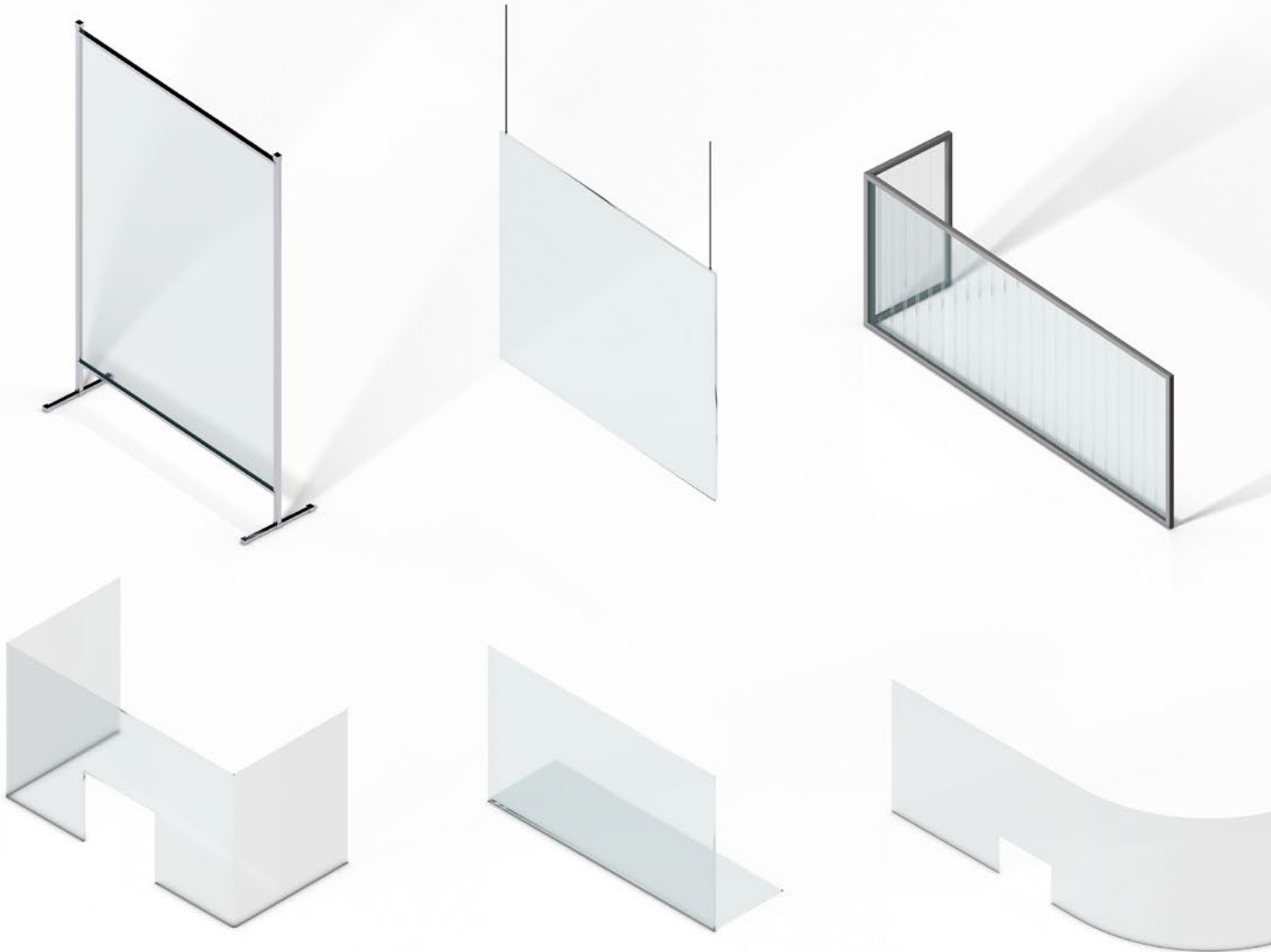
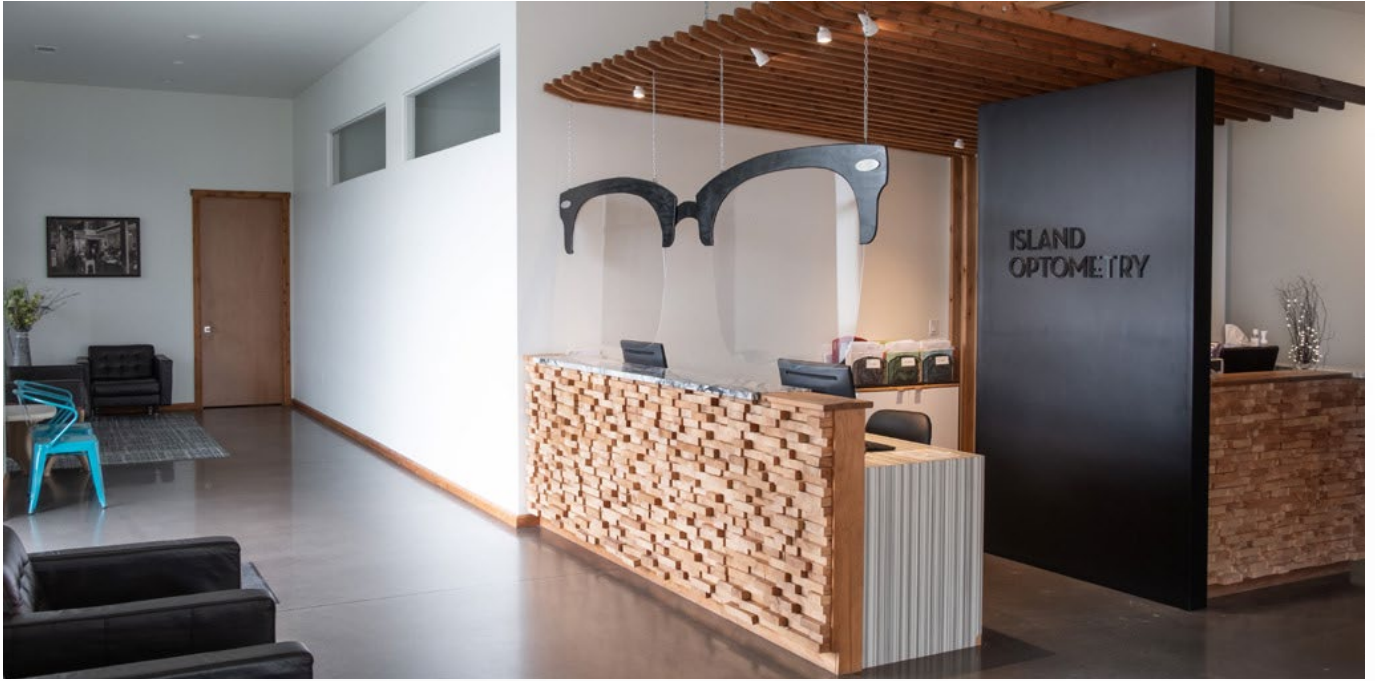
PLEXIGLAS® products with smooth, non-porous surfaces are generally suited for areas with strict hygiene demands as they are easy to clean and can be disinfected with suitable products. PLEXIGLAS® XT Antimicrobial provides even more protection and ease of use: Its antimicrobial coating on both sides provides effective protection against a broad range of bacteria and viruses. As such, there is no need for additional disinfection. The material itself is also free from any risks to health, because it does not release any of its contents into the environment during use. PLEXIGLAS® is often used in the medical field and for applications involving contact with food.



Types of hygiene protection
Portable. Fixed. Or suspended.

- 1 Push-fit system
- 2 Portable stand
- 3 Fixed hygiene protection
- 4 Suspended hygiene protection
- 5 Free-standing hygiene protection





Various application types for hygiene protection made of PLEXIGLAS®: Standing system, suspended hygiene protection, push-fit system for counters, portable stand, protection with side edge, protection with bottom edge, fixed counter protection.

Suitable for any situation

PLEXIGLAS® can be used for a wide range of hygiene protection measures, adapted to the environment and its purpose. Examples include portable counter attachments with service hatch cut-out, fixed protective screens, suspended hygiene protection, portable screens, and colored, translucent, or opaque partitions.

Flexible without fixing

Portable stands for counters and tables are the quickest and easiest hygiene protection solution in shops, banks, health centers, and offices. It is also conceivable to see them used at trade fairs or other temporary venues.

Free-standing hygiene protection made of PLEXIGLAS® can be moved easily and safely at any time because acrylic glass is considerably lighter than glass of the same size. And because of the higher break resistance, the risk of splinters and injuries is significantly lower.

With a simple push-fit system, all you need to do is push a PLEXIGLAS® panel of the desired size into two supports, which could be wood, aluminum, or stainless steel, depending on the design. Counter displays can be produced with or without a service hatch cut-out.

Fixed protection for the long term

Purchase and install once, and benefit from long-term protection. Fixed, integrated hygiene protection made of PLEXIGLAS® is a permanent solution, thanks to the high-quality and long-lasting material. Because PLEXIGLAS® can be made into practically any shape and is easy to process, it fits in precisely with its surroundings. Protective screens can be easily affixed to other components or furniture with removable connections, including guide rails, screen holders, clamping profiles, and screws.

Protected from above

If the surroundings don't allow for a portable sneeze guard or protective screen to be installed on the counter, suspended hygiene protection for ceiling mounting can be the right choice. This can even be achieved with PLEXIGLAS® solid sheets, thanks to their light weight and break resistance. Drill holes and other suspension devices are easy to install, and edges can be rounded off if preferred.

■ PLEXIGLAS® GS/XT

■ PLEXIGLAS® Multi-Skin Sheets

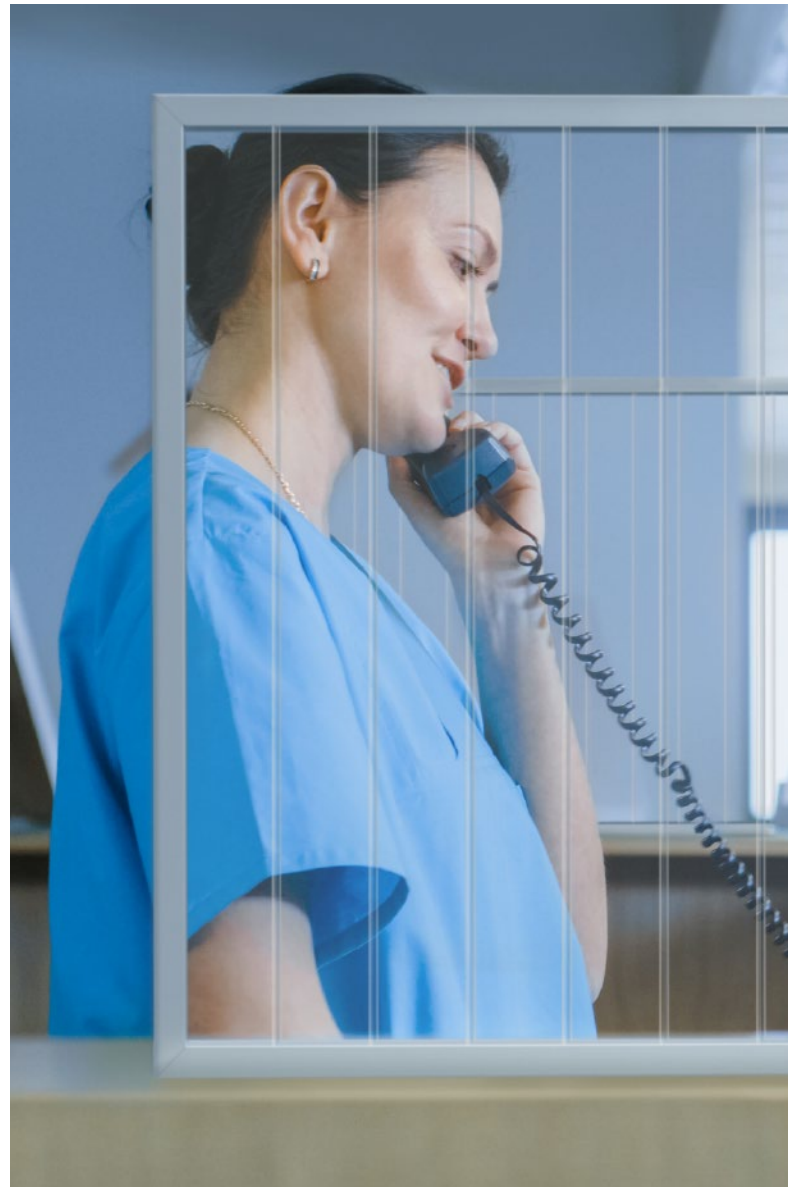
■ PLEXIGLAS® Film

■ PLEXIGLAS® GS/XT

■ PLEXIGLAS® Multi-Skin Sheets

■ PLEXIGLAS® Film

PLEXIGLAS® hygiene protection varieties Versatile. Flexible. Individual.



Protective screen made from PLEXIGLAS® multi-skin sheets

PLEXIGLAS® is ideal for a wide range of applications.

All transparent and colorless PLEXIGLAS® solid sheets, multi-skin sheets and films are suitable for use as sneeze guards, counter attachments, or protective barriers. Different varieties of hygiene protection are available depending on the purpose, requirements and degree of use.

All of the PLEXIGLAS® products shown here are ideal as barriers against droplet infections. The coated variants provide additional ease of use.

PLEXIGLAS® multi-skin sheets are particularly stable

Protective screens with larger dimensions can be free-standing or mounted on counters, using [PLEXIGLAS® multi-skin sheets](#) in a frame design. Thanks to their shape, these twin-wall sheets are highly stable when used vertically, yet remarkably lightweight.

PLEXIGLAS® Optical HC is highly scratch-resistant

If the surface of PLEXIGLAS® gets scratched, it's easy to buff it out, unlike with many other transparent plastics. For highly used applications requiring frequent cleaning, the scratch-resistant [PLEXIGLAS® Optical HC](#) variant is recommended. This sheet material is even more resistant against scratches, such as those caused by improper cleaning, handling or other use, as well as against abrasion, moisture and cleaning agents.

No need for polishing thanks to the protective coating.

PLEXIGLAS® XT Antimicrobial increases protection

[PLEXIGLAS® XT Antimicrobial](#) is the best solution to save time and effort and prevent damage caused by improper cleaning and disinfection, particularly in applications with high public traffic and increased hygiene demands. The surface coating prevents microbial growth, meaning



At a glance:

- Transparent view
- Variety of designs
- Adapts to practically any interior
- Long-lasting without yellowing

additional disinfection is not required. At the same time, the coating on both sides provides excellent resistance to abrasion and chemicals.

The protective and antimicrobial coating eliminates the need for disinfection, while simultaneously providing high scratch resistance.

PLEXIGLAS® film is a lightweight alternative.

[PLEXIGLAS® impact-resistant film](#) is particularly light and stable as a protective barrier on suspended hygiene protection. Attach it to a structure, such as a frame or clamping rails.

PLEXIGLAS® is also available in opaque variants

In most applications, hygiene protection should be transparent to help maintain eye contact with customers. In other situations, dividers and screens simultaneously

function as a protective barrier against infections, as well as an optical barrier, for example in offices or health centers. Opaque or translucent colored PLEXIGLAS® sheets allow for an elegant design.

PLEXIGLAS® in corporate design

Designed with a personal touch – premium hygiene protection made from PLEXIGLAS® can become an image bearer: logos and lettering can be printed or laser-engraved in high definition. It is also possible to create eye-catching effects using the material. This is how companies and public institutions can reassure customers that visitors that “we are looking out for your health”.



Drilling



Sawing

Processing PLEXIGLAS® Simple. Efficient. Tailor-made.

PLEXIGLAS® is easy to process. As most conventional wood processing machines are suitable for [cutting](#) and [drilling](#) PLEXIGLAS®, the manufacture of hygiene protection fits seamlessly into furniture and shop construction production processes.

Bonding PLEXIGLAS®

PLEXIGLAS® parts can be easily [joined](#) to one another, using specially developed ACRIFIX® adhesives. It is also possible to bond PLEXIGLAS® to other materials such as metal, stone, and glass, using durable silicone-based elastic adhesives.

Several special features must be observed when bonding coated sheets such as PLEXIGLAS® Optical HC and PLEXIGLAS® XT Antimicrobial. These aspects are described in the [Technical Information](#).

Forming PLEXIGLAS®

PLEXIGLAS® can be made into practically any [shape](#) you can think of. Simply heat the material first, and then shape it. Linear bending and thermoforming are not suitable processing methods for coated PLEXIGLAS® variants, such as PLEXIGLAS® Optical HC and PLEXIGLAS® XT Antimicrobial. These methods can damage the coating or cause it to separate from the sheet.

Installing PLEXIGLAS® onto plastic surfaces

PLEXIGLAS® hygiene protection can be [mounted](#) on counters, tables, or other structures. It is important to ensure that all materials that come into direct contact

At a glance:

- PLEXIGLAS® is easy to process
- Ensure mounting materials are plastic-compatible
- Tailor-made cuts and complete hygiene protection solutions are available in the [PLEXIGLAS® online shop](#) and for specialist processors

with PLEXIGLAS® – such as screws, clamps, guide rails, or grout – are compatible with polymethyl methacrylate or PMMA.

When drilling PLEXIGLAS®, ensure that the borehole is both wide enough and far enough from the edge of the sheet. The minimum distance from the edge should be no less than 1.5 times the diameter of the borehole. The borehole should be much larger than the stud bolt. As a rule of thumb, the diameter of the hole in millimeter = diameter of the screw + (length of the sheet in meters x5).

Order PLEXIGLAS® sections online

Save yourself the work: Sections for hygiene protection made out of the original acrylic glass from POLYVANTIS are available in the [PLEXIGLAS® online shop](#) under Sneeze Guards – cut to the dimensions and thickness you need. In addition, PLEXIGLAS® specialist processors can produce tailor-made blanks and complete solutions.



Cleaning

Suitable cleaning products:

- Water with dishwashing detergent
- Intensive plastic cleaner
- Benzene-free petroleum ether

Suitable disinfection products:

- Isopropanol (2-Propanol)

More information on processing, cleaning, and maintaining PLEXIGLAS® can be found at www.plexiglas.de/en/service/processing.

Cleaning and disinfecting PLEXIGLAS® Easy to maintain. Hygienic.

Cleaning and maintaining PLEXIGLAS® correctly

PLEXIGLAS® requires a different type of maintenance compared to glass. As such, commercially available glass cleaning agents should only be used on glass. PLEXIGLAS® hygiene protection is easy to clean and maintain. Simply follow these instructions:

- PLEXIGLAS® should not be cleaned when dry, as this can cause scratches on the surface.
- Clean dusty surfaces with water with a little dishwashing detergent and a soft, lint-free cloth or sponge, before wiping them again with a slightly damp cloth.
- To prevent the acrylic glass from attracting dust, an anti-static plastic cleaner can be used.
- To remove tougher and especially greasy stains, a strong plastic cleaning agent or benzene-free petroleum ether (light petroleum) may be used.
- However, cleaning agents should not contain benzene, ethanol, and other alcohols, organic materials, or thinners, as these can damage the surface.
- Isopropanol (2-propanol) can be used to clean and disinfect PLEXIGLAS® as long as it only comes into contact with the material for a short period and is wiped off with a damp cloth after.

At a glance:

- Do not wipe PLEXIGLAS® with a dry cloth
- A little water with soap is usually enough for cleaning
- Disinfectant is only needed if there is potential for high viral contamination

Disinfecting PLEXIGLAS® gently

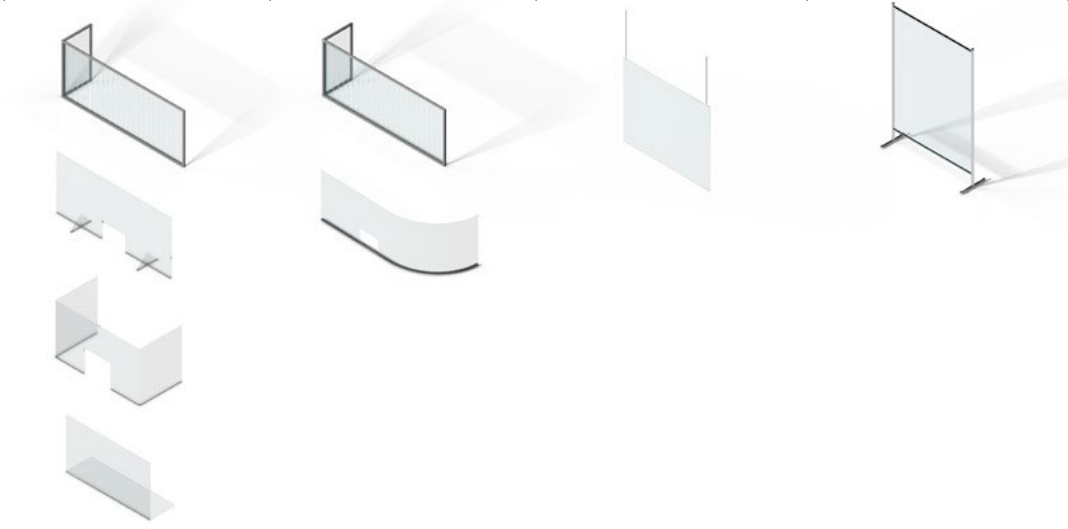
Cleaning the PLEXIGLAS® is generally sufficient to ensure the necessary level of hygiene. PLEXIGLAS® products should only be disinfected if subjected to high viral contamination – such as in the medical sector. Commercial disinfectants are only suitable in part, as they can damage the surface of the material.

Bacteria and viruses can be wiped off the surface without any problem using isopropanol (2-propanol) and a soft cloth. Isopropanol should only be applied briefly in order to react and then directly wiped off with a damp cloth.

PLEXIGLAS® XT Antimicrobial does not require disinfecting.

Products and applications

| | Portable hygiene protection | Fixed hygiene protection | Suspended hygiene protection | Partitions and screens |
|---|-----------------------------|--------------------------|------------------------------|------------------------|
| PLEXIGLAS® Solid Sheets | • | • | • | • |
| PLEXIGLAS® Optical HC/HCM Solid Sheets | • | • | • | • |
| PLEXIGLAS® XT Antimicrobial Solid Sheets | • | • | • | • |
| PLEXIGLAS® Multi-Skin Sheets | • | • | • | • |
| PLEXIGLAS® Film (with suitable frame structure) | • | • | • | • |



Products and properties

| Abrasion-resistant coating | Antimicrobial coating* | Thermoforming | Cold forming | Easy to clean | Possible to disinfect with isopropanol |
|----------------------------|------------------------|---------------|--------------|---------------|--|
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* does not require disinfecting

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www.plexiglas.de
www.polyvantis.com

® = registered trademark

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Certified to DIN EN ISO 9001 (Quality) and DIN EN ISO 14001 (Environment)

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