

Gloves for Glove Boxes



Glove box gloves allow safe handling inside a glove box. Typical applications of these special gloves are:

- Glove boxes, insulators and dismantling tents
- Chemical protection
- Occupational and Civil Protection
- Protection against electrostatic discharge (ESD protection)

Depending on the materials to be handled, a variety of sizes and diameters are available in the following materials:

- Styrene Butadiene Rubber (SBR)
- Chloroprene Rubber (CR)
- Ethylene-Propylene-Diene Rubber (EPDM)
- Bromobutyl Rubber (BIIR)
- Chlorosulfonated Polyethylene (CSM)
- Bromobutyl Rubber (BIIR) with FPM coating (Fluorine Rubber)
- Bromobutyl Rubber (BIIR) with CSM and FPM coating

For these glove box gloves we also manufacture the matching ports in various designs and materials. See the separate brochure and ask us.

Styrene-Butadiene Rubber (SBR)

This glove version offers the user a particularly high wearing comfort and provides a very good tactile sensitivity. The substances of the special glove comply with the current FDA positive list, which apply to the criteria of the pharmaceutical, medical and also of the food industry. The glove is translucent.

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.5 mm | 150 mm | 160...180 mm | XL (11) |
| 0.5 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.5 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.5 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.5 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |
| 0.5 mm | 300 mm | 315...365 mm | L (9-10), XL (11) |

The gloves have an ambivalent hand shape (left and right hand wearable)



Chloroprene Rubber (CR):

This glove material is also known under the brand name Neoprene and allows the user a high wearing comfort and a good tactile sensitivity. Due to the generally very good chemical resistance to most acids, alcohols, oils, fats and hydrocarbons, the use of the glove is not limited to chemical-pharmaceutical applications.

| Thickness: | Diameter of port: (External dimension) | Size: | Glove length: |
|-------------------|--------------------------------------------------|--------------|----------------------|
| 0.5 mm | 150 mm | 8, 9, 10 | 711 mm |
| 0.5 mm | 180 mm * | 9, 10 | 711 mm |
| 0.5 mm | 200 mm | 9, 10 | 813 mm |
| 0.5 mm | 230 mm | 9, 10 | 813 mm |
| 0.5 mm | 250 mm | 9, 10 | 813 mm |
| 0.5 mm | 300 mm | 9, 10 | 813 mm |
| 0.7 mm | 200 mm | 9, 10 | 813 mm |
| 0.7 mm | 250 mm | 9, 10 | 813 mm |
| 0.7 mm | 300 mm | 9, 10 | 813 mm |

The gloves have an ambivalent hand shape (left and right hand wearable).

* Available from stock:
All other versions:

min. order quantity 1 pair = 2 pcs.
min. Order quantity 10 pairs = 20 pcs.



Ethylene-Propylene-Diene Rubber (EPDM):

The glove allows the user a high wearing comfort and thus provides a very good tactile sensitivity. The substances of the model conform to the current FDA positive list, which apply to the criteria of the pharmaceutical, medical and also of the food industry. Due to its good electrical conductivity, the glove is also suitable for Ex-applications. It has a very good steam sterilizability. Sterilization tests have proven that the glove does not stick or adversely affect permeation.

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.4 mm, 0.6 mm | 145 mm | 150...170 mm | M (8-8.5) |
| 0.4 mm, 0.6 mm | 150 mm | 160...180 mm | XL (11) |
| 0.4 mm, 0.6 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.4 mm, 0.6 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.4 mm, 0.6 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.4 mm, 0.6 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.4 mm, 0.6 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |
| 0.4 mm, 0.6 mm | 300 mm | 315...365 mm | L (9-10), XL (11) |

The gloves have an ambivalent hand shape (left and right hand wearable).



Ethylene-Propylene-Diene Rubber (EPDM-w), white:

In contrast to the glove box gloves that have been in use so far, the substances comply with the FDA's positive list. The glove consists of a black user side and a white outside. This allows to recognize external damage such as pinholes very easily.

The uses of the glove are not limited to pharmaceutical applications. It can be safely used at any time in the food industry. Another special feature is its halogen-free material, which allows disposal by incinerators. The glove also has a very good steam sterilizability.

Ambivalent hand shape (left and right hand wearable).

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.5 mm | 150 mm | 160...180 mm | XL (11) |
| 0.5 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.5 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.5 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.5 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.5 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |
| 0.5 mm | 300 mm | 315...365 mm | L (9-10), XL (11) |

Anatomic hand shape (orders only possible in pairs):

| Thickness: | Diameter of cuff: | Diameter of port: (External dimension) | Size: |
|-------------------|--------------------------|--------------------------------------------------|-------------------|
| 0.5 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.5 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.5 mm | 250 mm | 265...305 mm | L (9-10) |



Bromobutyl Rubber (BIIR):

This glove is excellently suited for the extreme loads when working with ketones, acids, esters and amine derivatives. It also has a particular advantage in terms of its high gas impermeability. Butyl offers a very good flexibility and a good grip even at low temperatures. Its good temperature resistance also allows use under adverse climatic conditions. The special glove has good electrical discharge properties $< 10^8 \Omega$.

Ambivalent hand shape (left and right hand wearable).

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.4, 0.6, 0.8 mm | 145 mm | 150...170 mm | M (8-8.5) |
| 0.4, 0.6, 0.8 mm | 150 mm | 160...180 mm | XL (11) |
| 0.4, 0.6, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.4, 0.6, 0.8 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 300 mm | 315...365 mm | L (9-10), XL (11) |

Anatomic hand shape (orders only possible in pairs):

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|------------------------------|
| 0.4, 0.6, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.4, 0.6, 0.8 mm | 180 mm | 190...215 mm | S (7-7.5), L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 250 mm | 265...305 mm | L (9-10) |
| 0.4, 0.6, 0.8 mm | 300 mm | 315...365 mm | M (8-8.5) |



Chlorosulfonated Polyethylene (CSM):

This model is convincing due to its exceptional resistance to oxygen, ozone, UV, heat and chemical products. It is recommended when working with oxidising products, concentrated nitric acid, concentrated hydrochloric acid, ammonia, concentrated alkalis and alcohols.

Ambivalent hand shape (left and right hand wearable).

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.4, 0.6, 0.8 mm | 150 mm | 160...180 mm | XL (11) |
| 0.4, 0.6, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.4, 0.6, 0.8 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 300 mm | 315...365 mm | L (9-10), XL (11) |

Anatomic hand shape (orders only possible in pairs):

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.4, 0.6, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.4, 0.6, 0.8 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.4, 0.6, 0.8 mm | 250 mm | 265...305 mm | L (9-10) |



Bromobutyl Rubber (BIIR) with FPM coating (Fluorine Rubber)

The glove has a good aging and ozone resistance with a simultaneous high gas impermeability. It is also resistant to oxidizing chemicals.

Ambivalent hand shape (left and right hand wearable).

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.5 mm, 0.8 mm | 150 mm | 160...180 mm | XL (11) |
| 0.5 mm, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.5 mm, 0.8 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.5 mm, 0.8 mm | 8 in / 203 mm | 213...245 mm | L (9-10), XL (11) |
| 0.5 mm, 0.8 mm | 230 mm | 240...280 mm | L (9-10), XL (11) |
| 0.5 mm, 0.8 mm | 250 mm | 265...305 mm | L (9-10), XL (11) |

Anatomic hand shape (orders only possible in pairs):

| Thickness: | Diameter of sleeve: | Diameter of port: (External dimension) | Size: |
|-------------------|----------------------------|--------------------------------------------------|-------------------|
| 0.5 mm, 0.8 mm | 160 mm | 170...195 mm | L (9-10) |
| 0.5 mm, 0.8 mm | 180 mm | 190...215 mm | L (9-10), XL (11) |
| 0.5 mm, 0.8 mm | 250 mm | 265...305 mm | L (9-10) |



Bromobutyl Rubber (BIIR), a CSM and an FPM coating

The glove is a protective glove for extreme situations. Thanks to its three-layered construction, this variant offers the greatest possible security in terms of resistance and permeation. The glove was developed specifically for use in civil protection and in firefighting operations. It is only available as a work protection glove.



Glove-typical resistances:

| | SBR (Styrene Butadiene Rubber) | CR (Chloroprene Rubber) | EPDM (Ethylene-Propylene-Diene Rubber) | EPDM-w (Ethylene-Propylene-Diene Rubber) | BIIR (Bromine-Butyl Rubber) | CSM (chlorosulfonated Polyethylene) | Bromobutyl Rubber (BIIR) with CSM coating | Fluorine Rubber (FPM) | Bromobutyl Rubber (BIIR) with FPM coating | Bromobutyl Rubber (BIIR) with CSM and FPM coating |
|--------------------------------|--------------------------------|-------------------------|----------------------------------------|------------------------------------------|-----------------------------|-------------------------------------|-------------------------------------------|-----------------------|-------------------------------------------|---------------------------------------------------|
| | S | N | E | E-2 | B | C | BC | F | BF | BCF |
| High resistance to: | | | | | | | | | | |
| Hydrogen peroxide | X | X | X | X | | | | | | |
| Most disinfectants | | | X | X | | | | | | |
| Isopropanol | X | X | | | | | | | | |
| A variety of toxins | | | | | X | | X | X | | X |
| Ketones | | | | | X | | X | | | X |
| Acid | | X | | | X | | X | X | | X |
| Lye | | | | | | | | | | X |
| Ester | | | | | X | | X | | | X |
| Amine derivatives | | | | | X | | X | | | X |
| Aggressive Chemicals | | | | | | | | X | | X |
| Aliphatic hydrocarbons | | X | | | | | | X | | X |
| Aromatic hydrocarbons | | X | | | | | | X | | X |
| Halogenated hydrocarbons | | | | | | | | X | | X |
| Oils and fats | | X | | | | | | | X | X |
| Solvents | | | | | | | | | X | X |
| Oxygen | | | | | | X | X | | | X |
| Oxidizing chemicals | | | | | | X | X | | X | X |
| Concentrated nitric acid | | | | | | X | X | | | X |
| Concentr. hydrochloric acid | | | | | | X | X | | | X |
| Concentrated Alkalis | | | | | | X | X | | | X |
| Ammonia | | X | | | | X | X | | | X |
| Alcohol | | X | | | | X | X | | | X |
| Ozone | X | | | | | X | X | X | X | X |
| UV-Radiation | | | X | X | | | X | | | |
| Weather conditions | | X | X | X | | X | X | | | X |
| High impermeability of: | | | | | | | | | | |
| Steam | | | | | X | | X | X | X | X |
| Gases | | | | | X | X | X | X | X | X |

If you are in doubt, please contact us.

Other features:

| | SBR (Styrene Butadiene Rubber) | CR (Chloroprene Rubber) | EPDM (Ethylene-Propylene-Diene Rubber) | EPDM-w (Ethylene-Propylene-Diene Rubber) | BIIR (Bromine-Butyl Rubber) | CSM (chlorosulfonated Polyethylene) | Bromobutyl Rubber (BIIR) with CSM coating | Fluorine Rubber (FPM) | Bromobutyl Rubber (BIIR) with FPM coating | Bromobutyl Rubber (BIIR) with CSM and FPM coating |
|---------------------------------------|--------------------------------|-------------------------|----------------------------------------|------------------------------------------|-----------------------------|-------------------------------------|-------------------------------------------|-----------------------|-------------------------------------------|---------------------------------------------------|
| Latex-free | X | X | | | | | | | | |
| Halogen-free (combustible) | | | X | X | | | | | | |
| Steam sterilization | | | X | X | | | | | | |
| FDA-approval | X | | X | X | | | X | | | |
| High flexibility | X | X | | | X | | X | | | |
| Good tactile sensitivity | X | X | X | X | X | | X | | | |
| High wearing comfort | X | X | X | X | | | X | | | |
| Long live span | X | | | | | | X | | X | |
| Operating temperature range: | | | | | | | | | | |
| - 20 ... + 130°C | | | X | X | | | | | | |
| - 40 ... + 90°C | | | | | X | | | | | |
| - 20 ... + 120°C | | | | | | X | | | | |
| - 20 ... + 90°C | | | | | | | X | | X | X |
| - 30 ... + 220°C | | | | | | | X | | | |
| - 20 ... + 80°C | X | | | | | | | | | |
| - 30 ... + 50°C | | X | | | | | | | | |
| Inside black | | X | X | X | X | | X | | | X |
| Inside bright | | | | | | X | | | | |
| Outside black | | X | X | | X | | | | | X |
| Outside bright | | | | X | | X | X | | | |
| Inside and outside blue | | | | | | | | X | | |
| Translucent | X | | | | | | | | | |
| Antistatic | | | | | X | | | | | |
| ESD-protection: < 10 ⁸ Ohm | | | | | X | | | | | |
| Ex-proof: < 10 ⁶ Ohm | | | X | | | | | | | |

Test results:

| | SBR (Styrene Butadiene Rubber) | CR (Chloroprene Rubber) | EPDM (Ethylene-Propylene-Diene Rubber) | EPDM-w (Ethylene-Propylene-Diene Rubber) | BIIR (Bromine-Butyl Rubber) | CSM (chlorosulfonated Polyethylene) | Bromobutyl Rubber (BIIR) with CSM coating | Fluorine Rubber (FPM) | Bromobutyl Rubber (BIIR) with FPM coating | Bromobutyl Rubber (BIIR) with CSM and FPM coating | |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|-------------------------|----------------------------------------|------------------------------------------|-----------------------------|-------------------------------------|-------------------------------------------|-----------------------|-------------------------------------------|---------------------------------------------------|--|
| Chemical resistance according to DIN EN 374-3:2003 | | | | | | | | | | | |
| Class 1: Penetration time > 10 min. Class 2: Penetration time > 30 min. Class 3: Penetration time > 60 min. Class 4: Penetration time > 120 min. Class 5: Penetration time > 240 min. Class 6: Penetration time > 480 min. | | | | | | | | | | | |
| Methanol | 5 | 4 | 3 | 3 | 6 | 6 | 6 | 3 | 6 | 6 | |
| Sodium hydroxide 40% | 6 | | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 | |
| Sulfuric acid 96% | 6 | | 6 | 6 | | 6 | 6 | 6 | 6 | 6 | |
| Sulfuric acid 50% | | 6 | | | | | | | | | |
| Nitric acid 65% | | | | | | | | | | 6 | |
| Acetone | | | | | 5 | | | | | 6 | |
| Ethyl acetate | | | | | 3 | | | | | 2 | |
| Dichloromethane | | | | | | | | 3 | | 4 | |
| Toluene | | | | | | | | 6 | | 6 | |
| n-heptane | | | | | | | | 3 | | | |
| Trimethylamine | | | | | | | | | | 6 | |
| Acetonitrile | | | | | | | | | | 6 | |
| Diethylamine | | | | | | | | | | 4 | |
| Tetrahydrofuran | | | | | | | | | | 1 | |
| Ammonia | | | | | | | | | | 6 | |
| Chlorine | | | | | | | | | | 6 | |
| Hydrochloric | | | | | | | | | | 6 | |
| 1,2-Dichlorethane | | | | | | | | | | 6 | |
| Heptane | | | | | | | | | | 6 | |
| Hexane | | | | | | | | | | 6 | |
| n-octane | | | | | | | | | | 6 | |
| Mechanical properties According to DIN EN 388:2003 | | | | | | | | | | | |
| Abrasion resistance | 1 | 2 | 4 | 3 | 2 | 4 | 4 | 4 | 3 | 4 | |
| Cut resistance | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Tear growth resistance | 1 | 0 | 1 | 0 | 1 | 0 | 0 | 0 | 1 | 1 | |
| Puncture resistance | 1 | 0 | 1 | 0 | 0 | 1 | 1 | 0 | 1 | 1 | |