

PRODUCT INFORMATION

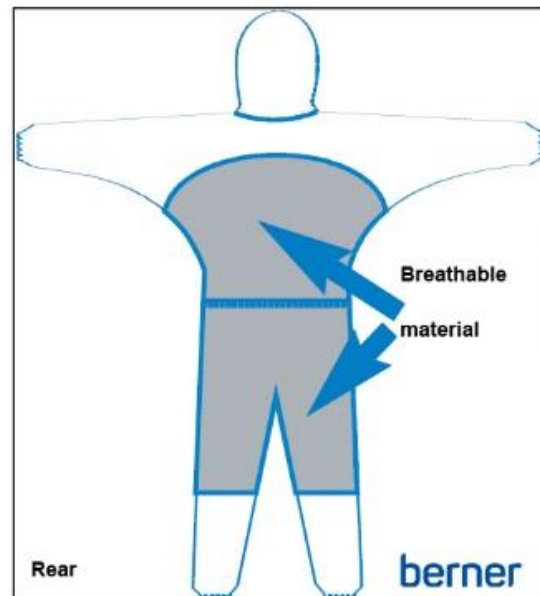
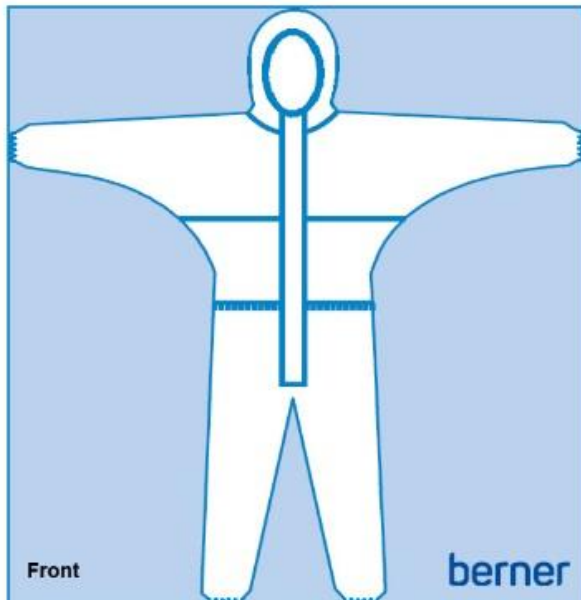
Chemical protective coverall activebreath 2

Breathable chemical coverall

Application and properties

- + **Maximum protection and comfort:** Type-tested and certificated as complex PPE category III; Type 5 / 6 chemical protective clothing; partial body protection. Comfortable to wear; Material is low in lint and particles; available as sterile and non-sterile versions: High neckline, zip with overlapping flap, elasticated sleeves, ankles and hood. Back of the overall with breathable non-protective material between shoulders and knees. Anti-static.
- + **Application range:** Suitable for protection against airborne solid particulate (Type 5) and liquids or aerosols (Type 6), limited protection against liquid chemicals.
Protective barrier: Liquid-impermeable coating in the front area, not coated in the back area between shoulder blades and the back of the knees.
- + **Protective properties:** Protection against all CMR drugs or chemicals cannot be guaranteed! In case of exposure to biohazards, which do not correspond to the degree of imperviousness of the protective clothing, bio-contamination of the wearer is possible.
- + **Before use:** Check for any damage! Do not use damaged coveralls!
- + **Waste disposal** for cytostatics: Waste requiring supervision (waste code: 18 01 04 in accordance with 2000/532/EC); in case of heavy contamination, waste requiring special supervision) (waste code: 18 01 08* or AS 18 02 07)* in accordance with 2000/532/EC; collect and dispose of waste separately!
1): Carcinogenic mutagenic reproductive toxic. 2): Dependent on chemicals/CMR-pharmaceutical drugs used. 3): Any types of waste marked with (*) is hazardous waste in accordance with the German § 41 des KrW-/AbfG. 4): Cytotoxic and cytostatic pharmaceuticals.

The protective coverall BERNER activebreath 2 is designed as chemical protective clothing. The protective material (non-woven polypropylene fleece, 69 g/m²) covers the complete front part of the overall as well as the shoulders and calves at the back. The part without the tested protective function (micro-porous polyethylene, SMMS 55 g/m²) is confined to the back - the area between the shoulder blades and the back of the knees.



Versions

Colour: white

Size	Chest(cm)	Height (cm)	Nos. per pack (non-sterile/sterile)	Order No.: (non-sterile)	Order No.: (sterile)
S	84 – 92	164 – 170	8 / 6 pieces	100183	100189
M	92 – 100	170 – 176	8 / 6 pieces	100184	100190
L	100 – 108	176 – 182	8 / 6 pieces	100185	100191
XL	108 – 116	182 – 188	8 / 6 pieces	100186	100192
XXL	116 – 124	188 – 194	8 / 6 pieces	100187	100193
XXXL	> 124	> 194	8 / 6 pieces	100188	100194

Material properties

Material	Non-woven polypropylene
Material weight	69 g/m ²
Liquid impermeable coating	Micro-porous polyethylene
Back material	Breathable SMMS 55 g/m ²
Total weight coverall	180 g – 252 g, ± 5g (depends on size)

Protection against mechanical properties

Mechanical material properties in accordance to EN 14235

Requirements

Abrasion resistance (1-6) in acc. to EN 530		2
Puncture resistance (1-5) acc. to EN 863		1
Seam tensile strength (1-5) acc. to ISO 13935-2		3
Flex cracking resistance (1-6) acc. to EN ISO 9073-4	longitudinal 6/6	transverse 6/6
Trapezoidal tear resistance (1-6) acc. to EN ISO 9073-4	longitudinal 2/6	transverse 2/6
Tensile strength (1/6) acc. to EN ISO 13934-1	longitudinal 3/6	transverse 1/6

Electrostatic properties

Antistatic treatment in accordance to EN 1149-5:2008

Protection against chemical hazards

Protection against chemical hazards: penetration (liquid-tight front page) in acc. to EN 14325 Abs. 4.12 or. EN 6530

Chemical	Breakthrough [min.]	Resistance
Sulphuric acid, 30%	3/3	3/3
Sodium hydroxide, 10%	3/3	3/3

O-xylene	0/3	0/3
1-butanol	0/3	0/3

Protection against chemicals

Permeation¹⁾ tested in accordance to the European standard EN 374-3:2003 / EN 16523-1:2015. For the following chemicals the breakthrough times²⁾ [min] / performance categories³⁾ (1-6) were determined:

Tested chemicals	Breakthrough time [min]	Performance class
Cisplatin	> 120 minutes	4
Congo-red, 1 %	> 30 minutes	2
Cyclophosphamide, 20 mg/ml	> 120 minutes	4
3,3 Diaminobenzidine, 1 mg/ml	> 30 minutes	2
Formaldehyde, 37 %	> 120 minutes	4
5-Fluorouracile, 10 mg/ml	> 120 minutes	4
Isopropanol, 70 %	> 30 minutes	2
Paclitaxel	> 120 minutes	4
Sodium hydroxide, 10 %	> 120 minutes	4
Sulphuric acid, 30 %	> 60 minutes	3
Thiotepa	> 120 minutes	4
Vincristine, 20 mg/ml	> 120 minutes	4

¹⁾: Movement of a chemical through a material on a molecular level.

²⁾: At a permeation rate of 1 µg/min·cm²

³⁾: The performance class does not reflect the actual duration of protection at the workstation, as temperature and abrasion may have an effect on these!

Sterilisation

Procedure Fumigation with ethylene oxide

Care instructions

- + Single use item
- + No washing, tumble drying, ironing
- + No dry cleaning

CE-marking

In accordance to the PPE regulation EU 2016/425 for complex PPE category III; Type test according to EN 13982-1:2004, EN 13034:2005+A1:2009 and EN 1149-5:2008. EC-type test and control measures by the notified body „0624“. Documented by EC type test certificate no. VC 1002210080-00.

EC-declaration of conformance and EC-Type test certificate can be downloaded at www.berner-safety.de.

Notified body „0624“

Certifying authority: Centrocot Tessile Contoiere e Abbigliamento S.p.A., Piazza S. Anna 2, 21052 Busto Arsizio (VA), Italien

Quality management system

Our **quality management system** is **tested and certified** by TÜV Management Service GmbH in accordance with DIN EN ISO 9001:2015. Regular **audits and production site inspections** guarantee the quality of our products.

Storage and transport conditions

- + Dark (protect from direct UV and sunlight)
 - + Cool (+5 to +40°C)
 - + Dry (relative humidity 30% - 60%)
 - + No contact with sharp and/ or pointed objects
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Shelf life

- + Non-sterile version: 5 years from date of manufacture
 - + Sterile version: 5 years from date of manufacture
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Distributor

Berner International GmbH, Werner-von-Siemens-Str. 19, 25337 Elmshorn
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