



VS 5 SERIES

VS 5 SERIES



Gas- and liquid-tight triple visor assemblage, universally chemical resistant, thermally stable and mechanically extremely robust, UV-resistant, crystal clear, antifog inner with antibacterial characteristics. 15-year long-life warranty



Gas-tight protective gloves: WIPAN C-CK-CK+ made of HPF elastomers, partially (CK+) with chemically resistant, gas- and liquid-tight barrier film



Gas- and liquid-tight protective boots with HPE elastomers, extremely robust, antistatic, highly resistant to chemicals, safety sole – flexible and safe



Gas-tight protective material (SYKAN/SILVERFLASH) with chemical resistant, gas- and liquid-tight protective barrier film

Ultra seam (SYKAN/SILVERFLASH) Patented safety seam made of para-aramid with a chemicals resistant tape cover including barrier film, facing outwards

HPF ULTRA zip (SYKAN/SILVERFLASH) Gas-tight safety zip with chemical resistant, gas- and liquid-tight protective barrier film

VS 5 series: gas-tight totally encapsulated chemical protective suit – type 1a (ET) – Internal SCBA

The standard equipment varies depending on the model:

- One-piece (gas-tight) totally encapsulated chemical protective suit with a firmly integrated triple Interchangeable VS 5 visor (with mechanical protective visor, chemical barrier and permanent antifog coating on the inside), a gas-tight zip (130 cm, optionally 180 cm), with partial fabric cover, integrated protective gloves and boots, integrated braces and pressure relief valves, with double protective fabric cover (incl. high-quality HPE membrane).
- CPS (chemical protective suit) for unrestricted use in firefighting, industry, works fire brigades and military.
- Classification by standard: Type 1a (ET) = gas-tight chemical protective suit with breathing air supply worn inside the chemical protective suit, for example compressed air equipment.
- These CPS unite excellent workmanship with high-grade materials.
- All popular firefighter helmets and industrial hard hats can be worn under the suit. We recommend a helmet, for example according to EN 443 for firefighter helmets, EN 16473 for technical rescue, EN 397 for industrial helmets and EN 12492 for mountaineering helmets (see accessories).
- Service life: 15 years: 10 years, then inspection; +5 years (10 years for limited-use CHEMBA)
- Optional: SMART STOCK (5 years maintenance-free, vacuum packaged with seal)
- Sizes: Five individual sizes (M to XXL)
- Optimum fit through range of sizes
- Perfect design also at critical points

Protective suits – special features

- Reusable chemical protective suits according to protection level EN 943-1/-2: 1a-b (ET)/1c and 2 ET (types 1a, 1b, 1c) and EN 14126 (type 3).
- HARMLESS MATERIALS:
 - PH-neutral behaviour, confirmed by AZO test (material colours).
 - PFOA-free and skin-friendly materials
 - Visors not made of PVC, thus no highly toxic gassing on combustion (flashover); free from heavy metals, asbestos, formaldehyde, CFCs, PCBs and PCTs
 - FREE FROM ADHESIVE: TESIMAX suits are produced without adhesives, making them extremely robust, better washable, more sustainable than other suits and safely reusable.
- Unique fabric structure consisting of gas-tight, chemically and thermally resistant, abrasion-resistant elastomers (TP, HPE), on robust, lightweight and super-flexible base fabrics (PA, HPA and HP para-aramid).
- Unique fabric structure with outward facing chemical barrier (HPP film) that reliably stops hazardous substances without affecting the base fabric as with other protective suits (REAL REUSABLE).
- Outstanding chemical protection for up to 8 h (chemicals tests according to EN 943 Parts 1 and 2) & according to 24-hour gas tests (CWA standard: Finabel 0.7 C NATO).
- Chemical permeation data list for approx. 1000 hazardous substances.
- Outstanding flame retardance according to EN 13274-4 (approx. 850°C), EN 11612 (SILVERFLASH) and flash-over test according to ISO 13506 (SYKAN and SILVERFLASH)
- Outstanding cold protection according to EN 943 and cryogenic tests (-80 °C down to -178 °C)
- Superior tensile and tear propagation strengths, puncture and abrasion resistance as well as seam strength offer extreme mechanical robustness and ensure the wearer's safety – according to EN 14325.
- Approved for use in hazardous areas – reliable protection against arcing.
- Available in different versions: Totally encapsulated suit type 1a ET (SCBA inside), 1b ET (SCBA outside) for work in confined spaces as well as 1c (without SCBA, with compressed air forced ventilation) and Type 3 liquid-tight protective suits as coveralls or powered filter unit protective suits.
- Extensive range of accessories: sensors, light, forced ventilation, functional underwear.
- Comprehensive service: professional decon system. Total Care. Safe and sustainable. Worldwide.
- These protective suits unite excellent quality with high-grade materials and components.
- Optimum fit through range of sizes.
- Perfect design also at critical points.





Suit description, VS 5 POLYRAN®-L or S

- One-piece, gas-tight chemical protective suit/totally encapsulated suit for use with ambient air-independent breathing apparatus (SCBA, compressed air equipment). With integrated visor, extremely resistant, flame retardant, flexible and permanent antifog coating, (covered) pressure relief valves, gas-tight (covered) zip and firmly integrated protective gloves and boots (optionally footlets and drip cuffs).
- CPS (chemical protective suit) for unrestricted use by fire brigades (training suit)/industry/works fire brigades/military; classification according to EN 943-1/-2 standard: type 1a

POLYRAN®-L or S FABRIC

- Extremely robust base fabric (PA) coated on both sides with POLYRAN, coated with performance thermoplastic (Performance TP) and permanently sealed with a special varnish (and fungicidal coating).
- Extremely light-weight and flexible
- Reusable, washable, very good mechanical properties (wear-, tear- and puncture-resistant)
- Excellent chemical resistance to most acids and alkalis
- Applications: Maritime industry pharmaceuticals, clinics and decontamination measures/applications
- Approvals: Cat. 3 Type 3-B, antistatic, liquid-tight protective clothing to EN 14605:2005, and extended material tests according to EN 14126 (B), EN 1149, EN 1073-2
- Seam technology: High-quality stitched and thermo-fused seam covers

TOP SEAM

- Seam technology: high-quality stitched (para-aramid thread) and thermo-fused seam covering

EQUIPMENT

- VISOR: Extremely chemically resistant, flexible interchangeable visor (VS 5), mechanically robust, firmly fitted to/integrated in the suit and permanent antifog coating on the inside.
- No toxic gassing during combustion (deflagration, flashover) to protect the suit wearer.
- Triple visor assemblage for three times the safety.
- 15-year guarantee: on crystal clear vision through the visor with maximum light transmission (>90%).
- > Optional: Self-adhesive, exchangeable tear-off visor with lug (included: with VS 20 SILVERFLASH®)

ZIP FASTENER

- With liquid- and gas-tight P-L/-S elastomer zip (130 cm), chemicals and thermally resistant, sewn with protective suit and permanently welded (not glued) to TOP seam cover. Closes from bottom to top for safety. Zip on the right side.
- > Optional fabric labyrinth cover

PROTECTIVE GLOVES

- Standard interchangeable protective gloves: MECH BLUE 351 – standard size 10, NBC protective glove with integrated cotton lining; colour: blue
- > For other sizes please enquire.
- > Alternative protective gloves (CBRN): WIPAN B+ (0.3, 0.5, 1.5), WIPAN C or CK (with para-aramid), WIPAN CK-PRO (with para-aramid) or WIPAN CK+ (with integrated para-aramid and protective barrier film)
- Standard WT protective gloves: Steel glove change system
- > Alternative: Quick-lock glove system

PROTECTIVE BOOTS

- Standard interchangeable protective boot: HPE 2 ACIFORT® – standard size 46
- HPE elastomer protective boot according to EN ISO 20345 S5 SRA AN; colour: black
- > Other sizes: 43 to 47 (please specify when ordering)
- > Alternatively: protective boots: HPE ULTRA-CHEM-GREEN HAZGUARD® / HPE ULTRA-CHEM-BLACK SA-BF (FPA)
- > Alternatively: footlets made of suit material with drip cuff

INTEGRATED EQUIPMENT

- Permanently integrated, exchangeable standard braces for size adjustment (type 1)
- Radio device pocket, inside
- Backpack padding, inside (normative mandatory)

OPTIONAL FEATURES

- See Accessories

APPLICATIONS

- Pharmaceuticals, clinics, military and civil defence, industry, maritime and fire services (unlimited)

Comprehensive protection

- CBRN risks: Chemical, biological, radioactive, nuclear
- > CBRN protective suit
- NBC risks: Nuclear, biological, chemical
- > ABC protective suit
- Industry: Gases, liquids, aerosols, chemicals, cryogenic media (hydrogen, nitrogen) and deflagration (flashover)
- Defence: Combat gases

OVERVIEW OF STANDARDS GS 3 (M) – APPROVALS (according to PPE Regulation (EU) 2016/425)

For SYKAN® 1/2/4, POLYRAN-L/-S and SILVERFLASH® protective suits:

- EN ISO 13688 = protective clothing – General requirements
- EN 943-1 (POLYRAN) and EN 943-2 (SYKAN and SILVERFLASH): Protective clothing type 1a (internal SCBA)
- SOLAS = national BG Verkehr approval for “maritime (on board) uses”
- Advanced material testing:
- EN 14126 = protection against biological agents “B”
- EN 1073-2 = particle-tight protective clothing
- EN 1149 = antistatic properties, dissipative (static inhibitor, ex factory)
- CBRN Finabel 0.7 GAS-TESTED (gases – complete protective suit with components)
- > Note: The current product certificate and technical product documentation apply.

SIZES

- Five individual sizes (M to XXL)
- Optimum fit through range of sizes

PRODUCT REFERENCE

- VS 5 POLYRAN®-L
- COUNTRY OF ORIGIN: GERMANY
- WEIGHT: approx. 6 kg without extras, in size L, with footlets/boots: approx. 1.75 kg
- COLOUR (outer): ■ signal-yellow, ■ signal-red or ■ Nato olive

LIFE CYCLE

15 years: 10 years, then inspection for an additional 5 years
-> Optional: SMART STOCK (5 years maintenance-free, vacuum packaged with seal)

ORDERING DATA

Sizes 150 to 165 cm	Order no.: 0201-151 S
Sizes 160 to 175 cm	Order no.: 0201-151 M
Sizes 170 to 185 cm	Order no.: 0201-151 L
Sizes 180 to 190 cm	Order no.: 0201-151 XL (standard)
Sizes 190 to 200 cm	Order no.: 0201-151 XXL

Note: see size charts (standard gloves: size 10 (see size chart) or standard protective boots: size 46 (43-47))
TIP: Also available in the even more rugged, durable POLYRAN-S in sizes S – XXL. Order no.: Please enquire.

ALL PRODUCTS INCLUDE

- Participation in TESIMAX SERVICEPOOL for reusable protective suits, available worldwide
- Participation in TESIMAX real-time training (RTT) for reusable protective suits, available in Germany
- Standard nylon storage bag, black
- Technical documentation: QR user manual and online TESIMAX Data Service (environmentally friendly)
- Optional: different textile storage bag (hanging or lying storage)
- Optional: plastic CPS transport boxes

OPTIONAL FUNCTIONS AND ACCESSORIES -> see Accessories.

Property rating, VS 5 POLYRAN-L/-S

Chemical resistance	■■■■■
Mechanical resistance	■■■■■
Heat: Contact heat at approx. 850 ± 50 °C	■■■■■
Heat: Hot vapour at about 350 °C	■■■■■
Heat: Radiant heat at about 1000 °C	Not tested
Cold: Contact cold at –30 °C	■■■■■
Cold: Contact cold at –80 °C	Not tested
Cold: Contact cold at –100 °C	Not tested
	100 %





Suit description, VS 5 CHEMBA®

- One-piece (gas-tight) chemical/firefighter protective suit (ET: Emergency Team) with permanently integrated VS 5 visor (permanent antifog coating inside), gas-tight zip with protective cover, permanently fitted protective gloves and footlets with drip cuffs (protective boots can optionally be supplied or connected directly), integrated strain-relief belt and pressure relief valves, covered and protected (incl. HPE membrane).
- Subsequently referred to as “CPS” (chemical protective suit) for unrestricted operational tasks in fire services, industry, plant fire brigades and military: ET (Emergency Teams); classification according to EN 943-1/-2 standard: type 1a ET = gas-tight chemical protective suit with an ambient air-independent breathing air supply worn inside the chemical protective suit, e.g. compressed air equipment.

CHEMBA® FABRIC

- The CHEMBA® (Eptaform®) fabric consists of a highly chemical resistant multi-layer barrier laminate combined with a mechanically durable PA matrix base fabric. The unique FABRIC DUAL PROTECTION SHIELD TECHNOLOGY offers superior, unlimited safety in use and complies with EN 943 (puncture resistance class 3). Nevertheless, the VS 5 CHEMBA® protective suit is ultra-light and flexible. The bright orange signal colour ensures increased work safety.

TOP SEAM

- Seam technology: high-quality stitched (para-aramid thread) and thermo-fused seam covering

EQUIPMENT

- VISOR: Extremely chemically resistant, flexible visor, mechanically robust, firmly fitted to/integrated in the suit and antifog coating on the inside.

ZIP FASTENER

- With liquid- and gas-tight HPP zip (approx. 130 cm), chemicals and thermally resistant, sewn with protective suit and permanently joined to TOP seam cover. Closes from top to bottom for safety. Zip on the right side.
- > Including fabric cover

PROTECTIVE GLOVES

- Standard interchangeable protective gloves: WIPAN B+ – standard size 10, HPE elastomer CBRN protective glove with barrier laminate inner glove; colour: black
- Protective gloves-standard: permanently integrated, not changeable.
- 5-finger cotton undergloves included

FOOTLETS OF SUIT MATERIAL (STANDARD)

- The footlets made of suit material also have a drip cuff. This allows the wearer to slip into an optional protective boot and fold the drip cuffs over the boot for additional splash protection. -> Optional: PROTECTIVE BOOTS: As VS 5 CHEMBA ST variant also available with fixed protective boots.

RECOMMENDED ADDITIONAL EQUIPMENT

- Standard protective boot: HPE-1 SA-BF; standard size: 46; HPE elastomer protective boot with FPA approval according to EN 15090, EN ISO 20345 S5 HRO SRC, EN 13832-3, EN 13287; colour: black; can be delivered with packed suit (not fixed to suit).
- > Other sizes: 43 to 47 (please specify when ordering)
- > Alternatively: protective boots HPE-3 HAZGUARD® /HPE-2 ACIFORT®

- PROTECTIVE BOOTS: As VS 5 CHEMBA ST version also available with fixed protective boots.
- Standard forced ventilation system: Narghilè system (360° rotatable external connection with internal Euro coupling – optionally available with TESIMAX F-AU T connector (internal air distribution with 2 plug-in nipples and a coupling for use with SCBA; see F-AU/CHEMBA user manual(s).

INTEGRATED EQUIPMENT

- Permanently integrated strain relief belt for ergonomic stabilisation of the suit during use
- Cotton undergloves
- Radio device pocket, inside

APPLICATIONS

- Pharmaceuticals, clinics, military and civil defence, industry, maritime and fire services (unlimited)

Comprehensive protection

- CBRN risks: Chemical, biological, radioactive, nuclear
- > CBRN protective suit
- NBC risks: Nuclear, biological, chemical
- > ABC protective suit
- Industry: Gases, liquids, aerosols, chemicals, cryogenic media (hydrogen, nitrogen) and deflagration (flashover)
- Defence: Combat gases

OVERVIEW OF STANDARDS – APPROVALS

(according to PPE Regulation (EU) 2016/425)
for CHEMBA® protective suits

- EN ISO 13688 = protective clothing – General requirements
- EN 943-1 in combination with EN 943-2-ET limited use; normal robustness: type 1a protective clothing (internal SCBA)
- S = national BG Verkehr approval for “maritime (on board) uses”
- Advanced material testing:
- EN 14126 = protection against biological agents “B”
- EN 1073-2 = particle-tight protective clothing
- EN 1149 = antistatic properties, dissipative (static inhibitor, ex factory)
- CBRN Finabel 0.7 GAS-TESTED (gases – complete protective suit with components)
- > Note: The current product certificate and technical product documentation apply.

SIZES

- Four individual sizes (M to XXL)
- Optimum fit through range of sizes

PRODUCT REFERENCE

- VS 5 CHEMBA®
- COUNTRY OF ORIGIN: Italy/Romania
- WEIGHT: approx. 2.5 kg without extras, in size L, with footlets/boots: approx. 1.75 kg

COLOUR: ■ signal orange (outer)

LIFE CYCLE

10 years

ORDERING DATA

-> Note: see size charts (standard gloves: size 10 (see size chart) or standard protective boots: size 46 (43-47))

Sizes 150 to 165 cm	Order no.: 0201-163 S
Sizes 160 to 175 cm	Order no.: 0201-163 M
Sizes 170 to 185 cm	Order no.: 0201-163 L
Sizes 180 to 190 cm	Order no.: 0201-163 XL (standard)
Sizes 190 to 200 cm	Order no.: 0201-163 XXL

In the variant with forced ventilation Narghilè system:

0201-163 FNL (VS 5 CHEMBA FNL)

In the variant with permanently attached protective boot:

0201-163 ST (VS 5 CHEMBA ST)

In the variant with permanently attached protective boot:

0201-163 ST (VS 5 CHEMBA ST FNL)

Recommended accessories for VS 5 CHEMBA FNL:

T-connector air distribution with 2 Euro sealing nipples and 1 Euro coupling Order no.: 0250-025

ALL PRODUCTS INCLUDE

- Standard film packaging, transparent
- 5-finger cotton undergloves
- Technical documentation
- > Optional: different textile storage bag (hanging or lying storage)
- > Optional: plastic CPS transport boxes

OPTIONAL FUNCTIONS AND ACCESSORIES -> see Accessories.

Property rating, VS 5 CHEMBA:

Chemical resistance	
Mechanical resistance	
Heat: Contact heat at approx. 850 ± 50 °C	
Heat: Hot vapour at approx. 350 °C	Not tested
Heat: Radiant heat at about 1000 °C	Not tested
Cold: Contact cold at –30 °C	
Cold: Contact cold at –80 °C	Not tested
Cold: Contact cold at –100 °C	Not tested

100 %



VS 5 SYKAN 1



Suit description, VS 5 SYKAN 1

- One-piece, gas-tight chemical protective suit (firefighter totally encapsulated suit for emergency teams (ET)), for use with ambient air-independent breathing apparatus (SCBA, compressed air equipment). With integrated visor, extremely resistant, flame retardant, flexible and permanent antifog coating, (covered) pressure relief valves, gas-tight (covered) zip and firmly integrated protective gloves and boots (optionally footlets and drip cuffs).
- CPS (chemical protective suit) for unrestricted use by fire brigades/ industry/works fire brigades/military: ET (Emergency Teams); classification according to EN 943-1/-2 standard: type 1a ET

SYKAN® 1 FABRIC

- The gas- and liquid-tight, chemical resistant fabric structure consists of five layers. The fabric has a robust high-performance base fabric (HPA) coated on both sides with chemically resistant, abrasion-resistant high-performance elastomers (HPE). The outside has a signal colour, the inside is grey. In addition, the fabric structure features a unique chemical barrier (HPP film), facing outwards, above the base fabric and one under the fabric.

ULTRA SEAM

- Seam technology: high quality sewn with chemically and thermally resistant para-aramid thread. External seam cover with a welded high-performance elastomer tape (HPE), i.e. thermo-welded to the fabric. The tape has a unique, integrated chemical barrier (HPP film) similar to the protective suit fabric.

EQUIPMENT

- VISOR: Extremely chemically resistant, flexible interchangeable visor (VS 5), mechanically robust, firmly fitted to/integrated in the suit and permanent antifog coating on the inside.
- No toxic gassing during combustion (deflagration, flashover) to protect the suit wearer.
- Triple visor assemblage for three times the safety.
- 15-year guarantee: on crystal clear vision through the visor with maximum light transmission (>90%).
- > Optional: Self-adhesive, exchangeable tear-off visor with lug (included: with VS 20 SILVERFLASH®)

ZIP FASTENER

- With liquid- and gas-tight HPE-ULTRA zip (130 cm, optionally 180 cm), including barrier film, chemicals and thermally resistant, sewn with protective suit and permanently welded (not glued) with ULTRA seam cover. Closes from bottom to top for safety. Zip on the right side.
- > Optional fabric labyrinth cover
- > Optional: 180 cm zip length

PROTECTIVE GLOVES

- Standard interchangeable protective gloves: WIPAN C – standard size 10 HPF elastomer CBRN protective glove with integrated cotton lining; colour: black
- > For other sizes please enquire.
- > Alternative protective gloves (CBRN): WIPAN B+ (0.3, 0.5, 1.5), WIPAN C or CK (with para-aramid), WIPAN CK-PRO (with para-aramid) or WIPAN CK+ (with integrated para-aramid and protective barrier film)
- Standard WT protective gloves: Steel glove change system
- > Alternative: Quick-lock glove system

PROTECTIVE BOOTS

- Standard interchangeable protective boot: HPE 1 SA-BF; standard size: 46; HPE elastomer protective boot with FPA approval according to EN 15090, EN ISO 20345 S5 HRO SRC, EN 13832-3, EN 13287; colour: black
- > Other sizes: 43 to 47 (please specify when ordering)
- > Alternatively: protective boots: HPE ULTRA-CHEM-GREEN HAZGUARD® / HPE ULTRA-CHEM-BLACK SA-BF (FPA)
- > Alternatively: footlets made of suit material with drip cuff

INTEGRATED EQUIPMENT

- Permanently integrated, exchangeable standard braces for size adjustment (type 1)
- Radio device pocket, inside
- Backpack padding, inside (normative mandatory)

APPLICATIONS

- Pharmaceuticals, clinics, military and civil defence, industry, maritime and fire services (unlimited)

Comprehensive protection

- CBRN risks: Chemical, biological, radioactive, nuclear
- > CBRN protective suit
- NBC risks: Nuclear, biological, chemical
- > ABC protective suit
- Industry: Gases, liquids, aerosols, chemicals, cryogenic media (hydrogen, nitrogen) and deflagration (flashover)
- Defence: Combat gases

OVERVIEW OF STANDARDS – APPROVALS
(according to PPE Regulation (EU) 2016/425)

For SYKAN® 1/2/4, POLYRAN-L/-S and SILVERFLASH® protective suits:

- EN ISO 13688 = protective clothing – General requirements
- EN 943-1 (POLYRAN) and EN 943-2 (SYKAN and SILVERFLASH): Protective clothing type 1a (internal SCBA)
- SOLAS = national BG Verkehr approval for “maritime (on board) uses”
- Advanced material testing:
- EN 14126 = protection against biological agents “B”
- EN 1073-2 = particle-tight protective clothing
- EN 1149 = antistatic properties, dissipative (static inhibitor, ex factory)
- CBRN Finabel 0.7 GAS-TESTED (gases – complete protective suit with components)
- > Note: The current product certificate and technical product documentation apply.

SIZES

- Five individual sizes (M to XXL)
- Optimum fit through range of sizes

PRODUCT REFERENCE

- VS 5 SYKAN' 1
- COUNTRY OF ORIGIN: GERMANY
- WEIGHT: approx. 6 kg without extras, in size L, with footlets/boots: approx. 1.75 kg

COLOUR: ■ signal yellow (outer) or ■ Nato olive (outer)

LIFE CYCLE

15 years: 10 years, then inspection for an additional 5 years
-> Optional: SMART STOCK (5 years maintenance-free, vacuum packaged with seal)

ORDERING DATA

> Note: see size charts (standard gloves: size 10 (see size chart) or standard protective boots: size 46 (43–47))

Sizes 150 to 165 cm	Order no.: 0201-250 S
Sizes 160 to 175 cm	Order no.: 0201-250 M
Sizes 170 to 185 cm	Order no.: 0201-250 L
Sizes 180 to 190 cm	Order no.: 0201-250 XL (standard)
Sizes 190 to 200 cm	Order no.: 0201-250 XXL

ALL PRODUCTS INCLUDE

- Participation in TESIMAX SERVICEPOOL for reusable protective suits, available worldwide
- Participation in TESIMAX real-time training (RTT) for reusable protective suits, available in Germany
- Standard nylon storage bag, black
- Technical documentation: QR instruction manual and online Tesimax Data Service (environmentally friendly)
- Optional: different textile storage bag (hanging or prone storage)
- Optional: plastic CPS transport boxes

OPTIONAL FUNCTIONS AND ACCESSORIES -> see Accessories.

Property rating, VS 5 SYKAN 1:

Chemical resistance	■■■■■■■■■■
Mechanical resistance	■■■■■■■■
Heat: Contact heat at approx. 850 ± 50 °C	■■■■■■■■
Heat: Hot vapour at about 350 °C	■■■■■■■■
Heat: Radiant heat at about 1000 °C	Not tested
Cold: Contact cold at –30 °C	■■■■■■■■■■
Cold: Contact cold at –80 °C	■■■■■■■■■■
Cold: Contact cold at –100 °C	Not tested

100 %





Suit description, VS 5 SYKAN 2

- One-piece, gas-tight chemical protective suit (firefighter totally encapsulated suit for emergency teams (ET)), for use with ambient air-independent breathing apparatus (SCBA, compressed air equipment). With integrated visor, extremely resistant, flame retardant, flexible and permanent antifog coating, (covered) pressure relief valves, gas-tight (covered) zip and firmly integrated protective gloves and boots (optionally footlets and drip cuffs).
- CPS (chemical protective suit) for unrestricted use by fire brigades/industry/works fire brigades/military: ET (Emergency Teams); classification according to EN 943-1/-2 standard: type 1a ET

SYKAN® 2 FABRIC

- The gas- and liquid-tight, chemical resistant fabric structure consists of four layers. The fabric has a robust high-performance base fabric (HPA) coated on both sides with chemically resistant, abrasion-resistant high-performance elastomers (HPE). The outside has a signal colour, the inside is grey. In addition, the fabric structure features a unique chemical barrier (HPP film), facing outwards, above the base fabric. SYKAN® 2 fabric is quiet and is more comfortable to wear than the stiffer foil protective suits.

ULTRA SEAM

- Seam technology: high quality sewn with chemically and thermally resistant para-aramid thread. External seam cover with a welded high-performance elastomer tape (HPE), i.e. thermo-welded to the fabric. The tape has a unique, integrated chemical barrier (HPP film) similar to the protective suit fabric.

EQUIPMENT

- VISOR: Extremely chemically resistant, flexible interchangeable visor (VS 5), mechanically robust, firmly fitted to/integrated in the suit and permanent antifog coating on the inside.
- No toxic gassing during combustion (deflagration, flashover) to protect the suit wearer.
- Triple visor assemblage for three times the safety.
- 15-year guarantee: on crystal clear vision through the visor with maximum light transmission (>90%).
- > Optional: Self-adhesive, exchangeable tear-off visor with lug (included: with VS 20 SILVERFLASH®)

ZIP FASTENER

- With liquid- and gas-tight HPE-ULTRA zip (130 cm, optionally 180 cm), including barrier film, chemicals and thermally resistant, sewn with protective suit and permanently welded (not glued) with ULTRA seam cover. Closes from bottom to top for safety. Zip on the right side.
- > Integrated: fabric labyrinth cover
- > Optional: 180 cm zip length

PROTECTIVE GLOVES

- Standard interchangeable protective gloves: WIPAN C – standard size 10 HPE elastomer CBRN protective glove with integrated cotton lining; colour: black
- > For other sizes please enquire.
- > Alternative protective gloves (CBRN): WIPAN B+ (0.3, 0.5, 1.5), WIPAN C or CK (with para-aramid), WIPAN CK-PRO (with para-aramid) or WIPAN CK+ (with integrated para-aramid and protective barrier film)
- Standard WT protective gloves: Steel glove change system
- > Alternative: Quick-lock glove system

PROTECTIVE BOOTS

- Standard interchangeable protective boot: HPE 1 SA-BF; standard size: 46; HPE elastomer protective boot with FPA approval according to EN 15090, EN ISO 20345 S5 HRO SRC, EN 13832-3, EN 13287; colour: black
- > Other sizes: 43 to 47 (please specify when ordering)
- > Alternatively: protective boots: HPE ULTRA-CHEM-GREEN HAZGUARD® / HPE ULTRA-CHEM-BLACK SA-BF (FPA)
- > Alternatively: footlets made of suit material with drip cuff

INTEGRATED EQUIPMENT

- Permanently integrated, exchangeable standard braces for size adjustment (type 1)
- Radio device pocket, inside
- Backpack padding, inside (normative mandatory)

APPLICATIONS

- Pharmaceuticals, clinics, military and civil defence, industry, maritime and fire services (unlimited)

Comprehensive protection

- CBRN risks: Chemical, biological, radioactive, nuclear
- > CBRN protective suit
- NBC risks: Nuclear, biological, chemical
- > ABC protective suit
- Industry: Gases, liquids, aerosols, chemicals, cryogenic media (hydrogen, nitrogen) and deflagration (flashover)
- Defence: Combat gases

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(according to PPE Regulation (EU) 2016/425)
For SYKAN® 1/2/4, POLYRAN-L/-S and SILVERFLASH® protective suits:

- EN ISO 13688 = protective clothing – General requirements
- EN 943-1 (POLYRAN) and EN 943-2 (SYKAN and SILVERFLASH): Protective clothing type 1a (internal SCBA)
- SOLAS = national BG Verkehr approval for “maritime (on board) uses”
- Advanced material testing:
- EN 14126 = protection against biological agents “B”
- EN 1073-2 = particle-tight protective clothing
- EN 1149 = antistatic properties, dissipative (static inhibitor, ex factory)
- CBRN Finabel 0.7 GAS-TESTED (gases – complete protective suit with components)
- > Note: The current product certificate and technical product documentation apply.

SIZES

- Five individual sizes (M to XXL)
- Optimum fit through range of sizes

PRODUCT REFERENCE

- VS 5 SYKAN® 2
- COUNTRY OF ORIGIN: GERMANY
- WEIGHT: approx. 6 kg without extras, in size L, with footlets/boots: approx. 1.75 kg

COLOUR: signal orange (outer) or Nato olive (outer)

LIFE CYCLE

- 15 years: 10 years, then inspection for an additional 5 years
- > Optional: SMART STOCK (5 years maintenance-free, vacuum packaged with seal)

ORDERING DATA

- > Note: see size charts (standard gloves: size 10 (see size chart) or standard protective boots: size 46 (43–47))

Sizes 150 to 165 cm	Order no.: 0201-212 S
Sizes 160 to 175 cm	Order no.: 0201-212 M
Sizes 170 to 185 cm	Order no.: 0201-212 L
Sizes 180 to 190 cm	Order no.: 0201-212 XL (standard)
Sizes 190 to 200 cm	Order no.: 0201-212 XXL

ALL PRODUCTS INCLUDE

- Participation in TESIMAX SERVICEPOOL for reusable protective suits, available worldwide
- Participation in TESIMAX real-time training (RTT) for reusable protective suits, available in Germany
- Standard nylon storage bag, black
- Technical documentation: QR instruction manual and online Tesimax Data Service (environmentally friendly)
- Optional: different textile storage bag (hanging or prone storage)
- Optional: plastic CPS transport boxes

OPTIONAL FUNCTIONS AND ACCESSORIES -> see Accessories.

Property rating, VS 5 SYKAN 2:

Chemical resistance	
Mechanical resistance	
Heat: Contact heat at approx. 850 ± 50 °C	
Heat: Hot vapour at about 350 °C	
Heat: Radiant heat at about 1000 °C	Not tested
Cold: Contact cold at –30 °C	
Cold: Contact cold at –80 °C	
Cold: Contact cold at –100 °C	Not tested



Resistance	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
Chemical resistance	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow	Yellow
Mechanical resistance	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey	Grey
Heat: Contact heat at approx. 850 ± 50 °C	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Heat: Hot vapour at about 350 °C	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
Heat: Radiant heat at about 1000 °C	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested	Not tested
Cold: Contact cold at -30 °C	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cold: Contact cold at -80 °C	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue
Cold: Contact cold at -100 °C	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue	Blue

