

TRELLCHEM®



SAFETY AND QUALITY STANDARDS

TRELLCHEM SUPER

Provides excellent protection against hazardous chemicals in liquid, vapor, gaseous and solid form. Designed to carry the breathing apparatus inside the suit. Trelchem® Super is fully certified in accordance with the European standard EN 943-1 and EN 943-2/ET.

GARMENT MATERIAL

The Trelchem® Super material is based on a real woven fabric coated with elastomers. This construction maximizes strength and durability of a material while maintaining softness and flexibility. The combination of butyl rubber with Viton® on top offers an outstanding resistance to chemical attack from a wide range of different chemicals.

COLOUR

Yellow or olive green.

STANDARDS

Tested and certified in accordance with EN 943-1 and EN 943-2/ET.





Type CV



Type VP1



Type T

DESIGN

Trelchem® Super comes in different designs to fit all user preferences:

- Encapsulating design with hump (type CV or VP1), BA worn inside the suit or
- Non-encapsulating design with face seal and without hump (type T), BA worn outside the suit.
- Encapsulating design for use with external air source (type Freeflow). See separate product sheet.

VISOR

On encapsulating suits the visor is made from a rigid 2 mm impact and chemical resistant PVC. Option of two visors; CV or the larger VP1.

FACE SEAL

The non-encapsulating suits have a rubber face seal which is anatomically designed for optimum safety and comfort. It provides users with a tight, yet perfectly comfortable fit around the face.

ZIPPER

Strong and durable gastight chloroprene rubber coated zipper. Closing downwards for added safety. The zipper is protected by a splash guard (flap).

Note: EN 943-2/ET certified suits are equipped with the Trelchem® HCR zipper.

VENTILATION

A ventilation system is included as standard for Trelchem® suits. For the safety of the wearer it provides a constant level of overpressure inside the suit. The Trelchem® regulation valve is made of a chemical resistant material. 3 ventilation rates (2, 30 and 100 l/min) plus zero/off position. Large thumbwheel designed for a good grip. The valve is also available in a passthrough version for use with external air supply. Different types of couplings are available.



With the **Trellechm® Bayonet glove ring system** it is quick and easy to exchange both inner barrier gloves and outer rubber gloves.



Trellechm® Mk II regulating valve for suit ventilation

GLOVES & ATTACHMENTS

The suit is fitted with Trellechm® Viton®/butyl rubber gloves in combination with rubber cuffs for added safety. Other glove options are available. The gloves are attached with the Trellechm® Bayonet glove ring system, which offers quick and simple glove exchange.

FOOTWEAR & ATTACHMENTS

Attached black nitrile rubber safety boots with European approval as Firemen's boots. The boots are fixed with an ergonomically designed ring attachment, which simplifies boot exchange and provides a smooth yet tight fit of suit material around the boot shaft. Alternatively the suit is equipped with a sewn-on sock/bootie in the suit material.

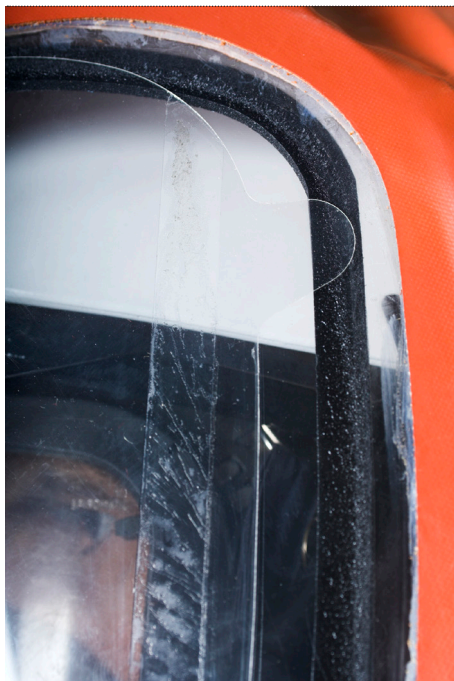
SEAMS

Seams are stitched and sealed inside and outside with a glued-on tape.

ACCESSORIES

For the EN 943-1 standard to be fulfilled a TC Hood or a Minihood is required to be worn on top of non-encapsulating suits (type T). A Minihood is always delivered with Trellechm® type T suits.

The visor can be equipped with an antifog lens and/or a tear-off lens. A wide range of other accessories is available for maintenance, storage etc.



ANTIFOG LENS & TEAR-OFF LENS

Attached to the inside of the visor, the antifog lens prevents the visor from becoming foggy. Additionally a tear-off lens can be attached to the outside of the visor to prevent scratches and splashes from aggressive chemical substances. Just tear off for a clean and unobstructed visor!



Trellchem® storage bag

PERMEATION DATA

CHEMICAL	BT TIME (MIN)	CHEMICAL	BT TIME (MIN)
*Acetone	> 480	Lewisite (L)	> 1440
*Acetonitrile	> 480	*Methanol	> 480
*Anhydrous ammonia	> 480	*Methyl chloride	> 480
*1,3 Butadiene	> 480	Mustard gas (HD)	> 480
*Carbon disulfide 95%	> 480	*Nitrobenzene	> 480
*Chlorine	> 480	Sarine (GB)	> 1440
*Dichloromethane	58	*Sodium hydroxide 40%	> 480
*Diethyl amine	53	Soman (GD)	> 1440
*Dimethyl formamide	> 480	*Sulphuric acid 98%	> 480
*Ethyl acetate	252	Tabun (GA)	> 1440
*Ethylene oxide	> 480	*Tetrachloroethylene	143
Heptane	> 480	*Tetrahydrofuran	28
*Hexane	> 480	*Toluene	74
*Hydrogen chloride	> 480	VX	> 480

The test chemicals marked with an asterisk (*) are stipulated (minimum requirement) in the American standard NFPA 1991. The tests are performed in accordance with ASTM F 739 with breakthrough criterion 0.1 µg/cm² *min. The underlined chemicals are stipulated (minimum requirement) in the European standard EN 943-2. The tests are performed in accordance with EN 374-3 with breakthrough criterion 1.0 µg/cm² *min.

The chemical warfare agents (HD, GA, GB, GD, L, VX) are tested in accordance with FINABEL Conv. 0.7.C.

BT TIME = Breakthrough time.

More data is available on request.

MATERIAL PROPERTIES

PROPERTY	METHOD	RESULT	CLASS*
Abrasion resistance	EN 530, method 2	> 2000 cycles	6
Flex cracking resistance	ISO 7854, method B	> 100000 cycles	6
Flex cracking res. -30°	ISO 7854, method B	> 200 cycles	2
Tear resistance, warp/weft	ISO 9073-4	80 N	4
Tensile strength, warp/weft	ISO 13934-1	> 1000 N	6
Puncture resistance	EN 863	97 N	3
Seam strength	ISO 5082	891 N	6
Resistance to ignition	EN 13274-4, method 3	5 sec.	3

* Classifications according to EN 943-1.