



# SE-shield

*Personal protective ensemble*

Tychem F<sup>®</sup>  
Single-Use Hood



## User instructions

100259-04 D

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## User instructions for SE-shield ensemble Tychem F<sup>®</sup> Single-Use Hood H-TYVF

*Note (USA): SE-shield Tychem F<sup>®</sup> suits are not approved as protective suits in the USA and have not been tested or approved by NIOSH as protection against any contaminants which may penetrate the suit and/or attack the skin.*

SE-shield is a range of SEA personal protective ensembles for use in hazardous environments.

The SE-shield Tychem F<sup>®</sup> Hood is designed for use with the SE-shield Tychem F<sup>®</sup> suit to increase the level of protection. It can also be used with other brands of protective suit.

*Note: For use with the SE-shield Tychem F<sup>®</sup> suit, refer to the user instructions supplied with the suit.*

*Note: Refer to the SE400 or SE40 User Instructions for proper use of the respirators.*

***WARNING! Tychem F<sup>®</sup> material is not flame-resistant and should not be used around heat, flame, sparks, or in potentially flammable or explosive environments.***

***WARNING! All Tychem<sup>®</sup> materials cause electrostatic discharge under some conditions. Do not use in explosive atmospheres or in atmospheres containing hydrogen or enriched oxygen. For more information contact SEA.***

## Unpacking

Each hood is vacuum packed. When breaking the packaging, take care not to puncture the hood.

## Storage

Store the hood in a cool, dry place. Avoid direct sunlight. Avoid storing near sharp objects.

When stored correctly and with packaging seal unbroken, storage life of 5 to 10 years can be expected.

# Donning the hood

**Notes:**

- *When donning the hood it is essential to have an assistant.*
- *To ensure maximum protection, taping should be done in accordance with these instructions. Use SEA SE-shield Tape S-T1 or other 50 mm PVC "duct" tape.*

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## To don the hood

1. Fit the hood to the demand valve of the SEA breath-responsive respirator. With the breathing hose disconnected, and starting at the top of the demand valve, pass the valve through the elasticised opening in the hood.



2. Gently ease the opening around the entire circumference of the demand valve.



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3. Keep pulling the elastic all around towards the base of the demand valve.



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4. When finished, the elastic should sit snugly in the groove at the base of the valve.



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5. Pull the visor hole of the hood into the groove around the visor of the mask.



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6. The hood should now be securely sealed around both the demand valve and the visor.



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7. Attach the breathing hose to the face piece. If an exhalation valve shield (EVS, not shown) is to be used, fit this before attaching the hose.



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8. Pull the hood inside-out over the face piece and demand valve.



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9. The face piece is now ready to be put on.



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10. After donning the suit, sling the neck strap around your head.

*Note (USA): Refer to notes on page 2 for CBRN limitations on SE-shield suit approvals.*



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11. Put on the face piece.



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12. Tighten the head harness.  
As your vision is obstructed by the hood, it may be best to have an assistant help with the next steps.



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13. To increase comfort and minimise visor fogging, turn on the fan unit by pressing either the control button on the speaker unit or the power switch on the fan unit.



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14. Pull the integral hood of the suit over the head and fit it around the visor of the face piece. If the suit hood is not compatible with the SEA hood, it may be rolled up at the back of the neck.



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15. Zip up the suit all the way.



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16. Tape the flap from under the chin all the way down as far as it goes.



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17. Pull the hood back over the head.





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18. Even out the hood around the chest, shoulders and back.



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19. Tilt head backwards. Tape the front edge of the hood to the chest part of the suit.



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20. Tilt head forwards. Tape the rear edge of the hood to the back of the suit.



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21. Tilt head towards one side.  
Tape the hood to the  
opposite shoulder of the suit.  
Repeat with the other side.



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22. Finish sealing all edges that  
have not already been  
taped.



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23. The hood should now be  
completely sealed to the suit.



## Permeation data for Tychem F® material

Compound	S-TYVF suit material breakthrough time (min) <sup>1</sup>	Barrier film gloves breakthrough time (min.) <sup>2</sup>
<b>Chemical War Agents</b>		
Mustard (HD) liquid	>720 <sup>3</sup>	>480 <sup>7</sup>
Lewisite (L) liquid	360 <sup>3</sup>	not tested
Tabun (GA) liquid	>720 <sup>4</sup>	not tested
Sarin (GB) liquid	>720 <sup>4</sup>	>480 <sup>8</sup>
Soman (GD) liquid	>720 <sup>4</sup>	not tested
VX liquid	>720 <sup>4</sup>	not tested
<b>Industrial chemicals</b>		
Acetone	>480	>1440
Ammonia	79	>240 <sup>5</sup>
Carbon disulfide	>480	>1440
Chlorine	>480	>240
Dichloromethane	5	>480 <sup>6</sup>
Diethylamine	>480	>60
Ethyl acetate	>480	>1440
Ethylene glycol	>480	>240
Ethylene oxide	65	>240
Formaldehyde liquid (formalin solution)	>480	>240
Hexane	>480	>1440
Hydrochloric acid, 37%	>480	>240
Hydrogen chloride	>480	not tested
Hydrogen fluoride	immediate	not tested
Methanol	77	>480
Methyl chloride	>480	not tested
Monoethanolamine	>480	not tested
NaOH concentrate	>480	>480
Fuming nitric acid	14	180
Sulphur dioxide	38	not tested
Sulphuric acid 93%	>480	>1440

Compound	S-TYVF suit material breakthrough time (min) <sup>1</sup>	Barrier film gloves breakthrough time (min.) <sup>2</sup>
Tetrachloroethylene	>480	>1440
Toluene	>480	>1440
Xylene	>480	>1440

<sup>1</sup> Tested per ASTM F739, breakthrough criterion 0,1 µg/min/cm<sup>2</sup>, 25°C, test duration 8 hours.

<sup>2</sup> Tested per ASTM F739, breakthrough criterion 0,1 µg/min/cm<sup>2</sup>, 21°C.

<sup>3</sup> MIL-STD-282, Method T-209

<sup>4</sup> MIL-STD-282, Method T-208

<sup>5</sup> Ammonia water 25%

<sup>6</sup> Dichloromethane 90%, Isopropyl alcohol 10%

<sup>7</sup> MIL-STD-282, Method 204.1.2

<sup>8</sup> MIL-STD-282, Method 206.1.3

For further information please contact SEA.

## Decontamination and doffing

The SE-shield hood is disposable. Where decontamination is necessary, follow a decontamination procedure appropriate to the contaminant(s). The user should continue to wear the respirator during decontamination.



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