

# Response™ Escape Hood



## We know we're living in an uncertain world.



## Now you can know you're prepared.

### **Introducing the Response Hood**

When escaping from chemical, biological, or riot control agents, every second counts. Depend on the Response™ Escape Hood from MSA. The hood gives your employees the protection they need to escape from a terrorist situation safely, quickly and easily — whether they work in high-profile office environments, for government agencies or embassies, or as law enforcement or first responders. And since it fits most any size and is compatible with long hair, glasses or a beard, the MSA Response Escape Hood is the equipment of choice for today's diverse workforce.

### **Engineered for Maximum Performance**

Manufactured with a high-performance laminate material, the hood is designed to provide you with the latest in head and neck coverage with respiratory protection against chemical and biological agents. The soft, high-stretch rubber neck seal conforms to irregular neck contours, allowing a secure fit on a wide variety of users. Its unique nose cup helps reduce lens fogging and carbon dioxide buildup by directing airflow inside the hood.

The Response Escape Hood canister features a high-efficiency particulate filter and activated carbon to combat aerosols, gasses and vapors. In fact, the canister used in the hood contains 50% more carbon than similar canisters used by the U.S. military. Furthermore, MSA has performed extensive testing on the Response Escape Hood against both simulated and live chemical agents. (Results of this test appear on the back of this brochure.)

#### **Designed for Comfort**

In addition to designing the hood for maximum protection, MSA also took into account the comfort factor. A user who is potentially under stress requires ease of donning and use. The large lens and translucent hood allow better visibility, face recognition and help reduce claustrophobia. The nose cup allows communication superior to that of conventional devices, which require wearers to breathe through a mouth bit. With the integrated nose cup, wearers can breathe and speak normally to provide potentially life-saving communications. The hood also features cradle-type head straps that allow for quick, no assistance donning in the event of an emergency.

## Performance of Response Escape Hood Canister Against Various Chemical Agents

MSA's Response Escape Hood Canister has been tested to determine how effectively it can protect an individual against a variety of chemical agents.

This canister contains a pleated high-efficiency (P-100) filter to remove aerosols, radionuclides, and solid particulates; and an impregnated activated carbon bed to adsorb (filter out) gases and vapors. Tear gas agents are removed from the inspired airstream by the P-100 filter and the impregnated carbon bed. Mustard (HD), Sarin (GB), DMMP (a Sarin simulant), HCN, and CK are also effectively adsorbed by the carbon bed.

The challenge agents are listed in column 1; testing conditions and requirements in columns 2, 3, and 4; and test results in the last column. The Flow rate for all challenge agents was  $50 \pm 1$  LPM. Temperature was  $25 \pm 3$  degrees Centigrade.

#### MSA Response<sup>™</sup> Escape Hood Canister Testing Conditions and Results

Challenge Agent	Challenge Concentration, mg/m³	Relative Humidity, %	Minimum Service Time Requirement	TEST RESULTS: Service Time until Break, in minutes
Dimethyl Methylphosphonate (DMMP) (Sarin simulant) <i>Nerve Agent</i>	1000 ±70	25 ±0.5	60 minutes until a 0.04 mg/m³ break	>63
Sarin (GB) Nerve Agent	1000 ±25	50 ±5	65 minutes until a o.oo8 mg/m³ break	>65
Mustard Vapor (HD) Blister Agent	200 ±10	50 ±5	65 minutes until a 0.42 mg/m³ break	>65
Hydrogen Cyanide (AC) Blood Agent	550 ±25	50 ±3	30 minutes until a 5 mg/m³ break	>40
HCN after Equilibration for 6 hours @ 25% RH	550 ±25	50 ±3	30 minutes until a 5 mg/m³ break	>40
HCN after Equilibration for 6 hours @ 85% RH	550 ±25	50 ±3	30 minutes until a 5 mg/m³ break	>40
ortho-Chlorobenzylidene Malononitrile (CS) Tear Gas Irritant	23 ±8	50 ±3	480 minutes until a o.4 mg/m³ break	>480
CS Tear Gas after Equilibration for 6 hours @ 25% RH	23 ±8	25 ±3	480 minutes until a o.4 mg/m³ break	>480
CS Tear Gas after Equilibration for 6 hours @ 85% RH	23 ±8	85 ±3	480 minutes until a o.4 mg/m³ break	>480
α Chloroacetophenone (CN) Tear Gas Irritant	101 ±6	50 ±3	480 minutes until a 0.3 mg/m³ break	>480
CN Tear Gas after Equilibration for 6 hours @ 25% RH	101 ±6	25 ±3	480 minutes until a 0.3 mg/m³ break	>480
CN Tear Gas after Equilibration for 6 hours @ 85% RH	101 ±6	85 ±3	480 minutes until a o.3 mg/m³ break	>480
Oleoresin capsicum (C <sub>18</sub> H <sub>27</sub> NO <sub>3</sub> ), the "active" ingredient of the OC tear gas Irritant	37	50 ±3	None	>480 until a o.6 mg/m³ break
Cyanogen Chloride (CK) Blood agent	500 ±25	50 ±5	65 minutes until a 2.5 mg/m³ break	>65

Note 1. CK/GB/HD testing was performed by Edgewood Arsenal per EA-DTL-2239.

### **Ordering Information**

DescriptionPart NumberMSA Response Escape Hood with CBA/RCA canister, packaged10022208

Note: This Data Sheet contains only a general description of the Response Escape Hood. While uses and performance capabilities are described, under no circumstances should the products be used except by qualified, trained personnel, and not until the instructions, labels and other literature accompanying them have been carefully read and understood and the precautions therein set forth followed. Only they contain the complete and detailed information concerning these products.

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**NBC Safety** 

World Leaders in Defense Technology tel: (858)488-3300 fax: (858) 488-6320 sales@NBCsafety.com



