

# CBRN OVERBOOT



**workMaster™**  
by RESPIREX

Military

Civil Defence

Emergency Services

A chemically protective anti-static overboot with an ambidextrous quick-don design. Tested against a broad range of hazardous chemicals and chemical warfare agents, the boot design allows it to be fastened single-handedly in less than five seconds.

## Features

- Manufactured from our **chemically resistant** Hazmax™ FPA compound and certified to EN 13832-3:2018 (Footwear protecting against chemicals)
- Conforms to **EN 943-1** (Chemical protective clothing)
- **Greater than 24 hours permeation resistance against HD Mustard, VX & GD** chemical warfare agents
- **Resistant to Chemical Warfare agents** and decontamination solutions
- **Quick & easy to decontaminate**
- **Fuel and oil resistant** upper and sole
- Ingenious **rear entry design** ensures the boot is **quick and easy to fit and remove**
- Single **ambidextrous design** allows the boot to be worn on either the right or left foot to speed fitting and removal
- **Comfortable, lightweight**, flexible design
- Specifically designed to fit and completely cover military issue combat boots
- Seamless construction
- Can be rolled and stored in a kit-bag
- **Slip resistant**, non-clogging sole design
- Kick-off lug
- CE marked with date and year of manufacture
- REACH Compliant

## Care

- Machine washable at up to 60°C
- Shelf life of over 10 years

## Meets the requirements of

- **EN 13832-3: 2018** A,K,O,P,Q,R,T Chemical Protective Footwear
- **EN ISO 20347:2012** OB SRA A FO Safety Footwear

## Sizing

	US	EN	UK
X-Small	3 - 4½	34 - 35	2 - 3½
Small	5 - 6½	37 - 38	4 - 5½
Medium	7 - 8½	39 - 41	6 - 7½
Large	9 - 10½	42 - 43	8 - 9
X-Large	11 - 12	44 - 45	10 - 11
XX-Large	13 - 14	46 - 47	12 - 13
XXX-Large	15 - 16	48 - 50	14 - 15

**EN 13832-3**

Chemical  
Protective  
Footwear



Available in Olive Green (Pictured)  
or Respirax Combat Black



For use with combat/safety boots (boots not included)

Specifications, configurations and colours are subject to change without notice.

# CBRN OVERBOOT CHEMICAL PERMEATION

CHEMICAL	CAS NO.	LETTER	METHOD	BREAKTHROUGH
Acetic acid (Glacial)	64-19-7	N	EN 16523	> 12 Hours
<b>Acetone</b>	67-64-1	B	EN374-3	> 2 Hours
Acetone Cyanohydrin	75-86-5		EN374-3	> 8 Hours
<b>Acetonitrile</b>	75-05-08	C	EN374-3	> 6 Hours
Acrylic Acid	79-10-7		EN374-3	> 8 Hours
Acrylonitrile	107-13-1		EN374-3	> 2 Hours
Ammonia 33%	1336-21-6	O	EN 16523	> 32 Hours
<b>Ammonia Gas</b>	7664-41-7		EN374-3	> 8 Hours
Ammonium Hydroxide Solution 5% free NH <sub>3</sub>	1336-21-6		EN 16523	> 32 Hours
Ammonium Pentadecafluoro-octanoate (30% in water)	3825-26-1		EN374-3	> 8 Hours
Aniline	62-53-3		EN374-3	> 8 Hours
Anti-knock(Tetraethyl lead 60% Dibromoethane 30%/ Dichloroethane 10% TEL-CB)	78-00-2 / 106-03-4 / 107-06-2		EN374-3	> 8 Hours
Aqueous Phenol 85%	108-95-2		EN374-3	> 8 Hours
Arsenic Acid	7778-39-4		EN374-3	> 8 Hours
Benzene	71-43-2		EN374-3	> 4 Hours
Benzyl Chloride	100-44-7		EN374-3	> 8 Hours
Bromine	7726-95-6		EN374-3	> 7 Hours
Buta-1,3diene Gas	106-99-0		EN374-3	> 3 Hours
Butyl Acetate	123-86-4		EN374-3	> 6 Hours
Cable oil			EN374-3	> 8 Hours
Carbazole	86-74-8		EN374-3	> 8 Hours
<b>Carbon Disulphide</b>	75-15-0	E	EN374-3	> 1 Hour
<b>Chlorine Gas</b>	7782-50-5		EN374-3	> 3 Hours
Chloroacetic Acid 85%	79-11-8		EN 16523	> 32 Hours
Chromic Acid	1333-82-0		EN374-3	> 8 Hours
Cyclohexylamine	108-91-8		EN374-3	> 8 Hours
<b>Dichloromethane</b>	75-09-02	D	EN374-3	> 1 Hour
<b>Diethylamine</b>	109-89-7	G	EN374-3	> 2 Hours
Diethylene Glycol dimethylether	111-46-6		EN374-3	> 8 Hours
Dimethyl Formamide	68-12-2		EN374-3	> 5 Hours
Epichlorohydrin	106-89-8		EN374-3	> 7 Hours
Ethanol (Ethyl Alcohol)	64-17-5		EN374-3	> 8 Hours
<b>Ethyl Acetate</b>	141-78-6	I	EN374-3	> 4 Hours
Ethylene Glycol	107-21-1		EN374-3	> 8 Hours
Ethylene Dichloride	107-06-2		EN374-3	> 8 Hours
Ethylene Oxide	75-21-8		EN374-3	> 2 Hours
Ethylenediamine tetra-acetic acid tetrasodium salt (EDTA) 5%	64-02-8		EN374-3	> 8 Hours
Formaldehyde 37%	79-11-8	T	EN374-3	> 8 Hours
Formic Acid 65%	64-18-6		EN374-3	> 8 Hours
<b>Heptane</b>	142-82-5	J	EN374-3	> 8 Hours
Hexane	110-54-3		EN374-3	> 7 Hours
Hydrazine	302-01-2		EN374-3	> 8 Hours
Hydrazine 5%	7803-57-8		EN374-3	> 8 Hours
Hydrochloric Acid 37%	7647-01-0		EN 16523	> 32 Hours
Hydrofluoric Acid 48%	7664-39-3	S	EN374-3	> 66 Hours
Hydrofluoric Acid 73%	7664-39-3		EN374-3	> 8 Hours
<b>Hydrogen Chloride Gas</b>	7647-01-0		EN374-3	> 8 Hours
Hydrogen Fluoride gas anhydrous	7664-39-3		EN374-3	> 1 Hour
Hydrogen Peroxide (10 volume (3%) solution)	7722-84-1		EN374-3	> 8 Hours
Hydrogen Peroxide 50%	7722-84-1	P	EN374-3	> 8 Hours

CHEMICAL	CAS NO.	LETTER	METHOD	BREAKTHROUGH
Iso-butane	75-28-5		EN374-3	> 8 Hours
Iso-butane followed by Hydrofluoric acid 71-75%	75-28-5 + 7664-39-3		EN374-3	> 8 Hours
Iso-propanol (IPA)	67-63-0		EN 16523	> 32 Hours
m-Cresol	108-39-4		EN374-3	> 8 Hours
<b>Methanol</b>	67-56-1	A	EN374-3	> 8 Hours
Methyl Ethyl Ketone (M.E.K) 2-Butanone	78-93-3		EN374-3	> 2 Hours
Methyl Iodide 99%	74-88-4		EN374-3	> 1.5 Hours
Methyl Methacrylate	80-62-6		EN 369	> 3 Hours
methyl-1,2-pyrrolidone	872-50-4		EN369	> 8 Hours
Methylene Chloride Gas	74-87-3		EN374-3	> 1 Hour
Monochloroacetic acid	79-11-8		EN374-3	> 8 Hours
Naphthalene	91-20-3		EN374-3	> 8 Hours
N,N-Dimethylaniline	121-69-7		EN374-3	> 8 Hours
N,N-dimethyl acetamide	127-19-5		EN374-3	> 8 Hours
Nitric Acid 50%	7697-37-2	M	EN 16523	> 32 Hours
Nitric Acid 70% conc	7697-37-2		EN 16523	> 32 Hours
Nitric Acid Etchant 80/20	7697-37-2		EN374-3	> 8 Hours
Nitro Benzene	98-95-3		EN374-3	> 3 Hours
Oleum 40% SO <sub>3</sub>	8014-95-7		EN374-3	> 8 Hours
Oxalic Acid saturated solution	6153-56-6		EN374-3	> 8 Hours
Phenol 50% in Methanol	108-95-2/ 67-56-1		EN374-3	> 8 Hours
Phosphoric acid 25%	7664-38-2		EN 16523	> 32 Hours
Phosphoric acid 75%	7664-38-2		EN 16523	> 32 Hours
Propylene 1,2 oxide	75-56-9		EN374-3	> 1 Hours
Red Fuming Nitric acid	7697-37-2		EN374-3	> 4 Hours
Sodium Cyanide 30wt%	143-33-9		EN374-3	> 8 Hours
<b>Sodium Hydroxide 40%</b>	1310-73-2	K	EN374-3	> 8 Hours
Sodium Hypochlorite 16%	7681-52-9	R	EN374-3	> 8 Hours
Styrene	100-42-5		EN374-3	> 8 Hours
Sulphuric Acid 50%	7664-93-9	L	EN 16523	> 8 Hours
<b>Sulphuric Acid 96%</b>	7664-93-9		EN374-3	> 8 Hours
Tetrachloroethylene	127-18-4		EN374-3	> 3 Hours
Tetraethyl Lead (Octel Anti Knock)	78-00-2		EN374-3	> 8 Hours
<b>Tetrahydrofuran</b>	109-99-9	H	EN374-3	> 3 Hours
<b>Toluene</b>	108-88-3	F	EN374-3	> 4 Hours
Toluene 2,4 Diisocyanate	584-84-9		EN374-3	> 8 Hours
Trichloroethane	71-55-6		EN374-3	> 6 Hours
Trichloroethylene 1,1,2	79-01-6		EN374-3	> 3 Hours
Triethanol-amine	102-71-6		EN374-3	> 8 Hours
Triethylene Glycol	112-27-6		EN374-3	> 8 Hours
Trigonox K-80 Cumyl hydroperoxide 80% / 20% Cumene	80-15-9/ 98-82-8		EN 369	> 8 Hours
Xylene	1330-20-7		EN374-3	> 4 Hours

Chemicals in **bold** are the 15 standard test chemicals defined in EN943-2:2002

WARFARE AGENT	CAS NO.	METHOD	BREAKTHROUGH TIME
Cyanogen Chloride	506-77-4	NFPA	No permeation detected
Lewisite	541-25-3	NFPA	No permeation detected
Saren Gas	107-44-8	NFPA	No permeation detected
HD (Mustard Gas)	505-60-2	Def. Std.	> 24 Hours
GD (Soman)	96-64-0	Finabel 0.7.C.	> 24 Hours
VX	50782-69-9	Finabel 0.7.C.	> 48 Hours