

HAZMAX™ FPA BOOTS



workMaster™
by RESPIREX

Petrochemical

Emergency Services

Industrial Chemicals

Hazardous Waste

Pharmaceuticals

The Hazmax™ FPA boot adds heat resistance to our proven high-performance chemically protective Hazmax™ compound to produce the ultimate antistatic chemical boot for emergency responders.



EN 15090
Heat Resistance
EN 13832
Chemical Protection

Boot Shaft

- Green Hazmax chemically resistant compound shaft certified to EN 13832-3 level 5
- Conforms to EN 943-1 (Chemical protective clothing) and certified to this standard as part of an appropriate Respirax gas-tight suit
- Meets the requirements of NFPA 1991 (Chemical Vapour protection)
- Conforms to EN 15090:2012 Fire fighter boot standard
- 200 Joule epoxy coated steel toe cap
- Seamless construction
- Kick-off lug
- Extra shin protection
- Adjustable height
- Ankle guard
- Knitted nylon lining
- Comfort insole (removable and machine washable)
- CE marked on the shaft with date and year of manufacture
- REACH Compliant

Boot Sole

- Black vulcanized rubber sole for maximum grip - 30% better than a conventional safety boot sole
- Slip resistance performance twice that required by the SATRA TM144 standard
- Two to three times the wear resistance of conventional soles
- Stainless steel, penetration resistant mid-sole
- Fuel and oil resistant
- Greater cut resistance than conventional soles
- Resistance to hot contact 60 seconds 300°C
- Energy absorbing tunnel system
- Cold insulation
- Heat insulation EN 15090:2012 HI₃

Care

- Machine washable at up to 40°C
- Shelf life of over 10 years

Certification

Chemical Protective Footwear	EN 13832-3: 2006 K-O-R
Footwear for Firefighters	EN 15090:2012 Type F3A (HI ₃)
Safety Footwear	EN ISO 20345 S5 HRO SRC CI FO E
Personal Protective Equipment	PPE Regulation (EU) 2016/425

Sizes

UK	3	4	5	6	7	8	9	10	11	12	13	14	15
EU	35	36	37	39	41	42	43	44	45	46	47	49	50
US	4	5	6	7	8	9	10	11	12	13	14	15	16

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



HAZMAX™ FPA BOOTS - CHEMICAL PERMEATION

Chemical	CAS no.	Method	Breakthrough time
Acetic acid (Glacial)	64-19-7	EN374-3	Over 8 Hours
Acetone	67-64-1	EN374-3	Over 2 Hours
Acetone Cyanohydrin	75-86-5	EN374-3	Over 8 Hours
Acetonitrile	75-05-08	EN374-3	Over 6 Hours
Acrylic Acid	79-10-7	EN374-3	Over 8 Hours
Acrylonitrile	107-13-1	EN374-3	Over 2 Hours
Ammonia 5%	1336-21-6	EN374-3	Over 8 Hours
Ammonia Gas	7664-41-7	EN374-3	Over 8 Hours
Ammonium Pentadecafluoro-octanoate (30% in water)	3825-26-1	EN374-3	Over 8 Hours
Aniline	62-53-3	EN374-3	Over 8 Hours
Anti-knock(Tetraethyl lead 60%Dibromoethane 30%/ Dichloroethane 10% TEL-CB	78-00-2 / 106-03-4 / 107-06-2	EN374-3	Over 8 Hours
Aqueous Phenol 85%	108-95-2	EN374-3	Over 8 Hours
Arsenic Acid	7778-39-4	EN374-3	Over 8 Hours
Benzene	71-43-2	EN374-3	Over 4 Hours
Benzene 85.5%/Toluene 8.6%/ Xylene3.2%/ Naphalene2.7%		EN374-3	Over 3 Hours Benzene only
Benzyl Chloride	100-44-7	EN374-3	Over 8 Hours
Bromine	7726-95-6	EN374-3	Over 7 Hours
Buta-1,3diene Gas	106-99-0	EN374-3	Over 3 Hours
Butyl Acetate	123-86-4	EN374-3	Over 6 Hours
Cable oil		EN374-3	Over 8 Hours
Carbazole	86-74-8	EN374-3	Over 8 Hours
Carbon Disulphide	75-15-0	EN374-3	Over 1 HOUR
Chlorine Gas	7782-50-5	EN374-3	Over 3 Hours
Chromic Acid	1333-82-0	EN374-3	Over 8 Hours
Cyanogen Chloride	506-77-4	NFPA	No permeation detected
Cyclohexylamine	108-91-8	EN374-3	Over 8 Hours
Dichloromethane	75-09-02	EN374-3	Over 1 HOUR
Diethylamine	109-89-7	EN374-3	Over 2 Hours
Diethylene Glycol dimethylether	111-46-6	EN374-3	Over 8 Hours
Dimethyl Formamide	68-12-2	EN374-3	Over 8 Hours
Dimethylformamide	68-12-2	EN374-3	Over 3 Hours
Epichlorohydrin	106-89-8	EN374-3	Over 7 Hours
Ethanol (Ethyl Alcohol)	64-17-5	EN374-3	Over 8 Hours
Ethyl Acetate	141-78-6	EN374-3	Over 4 Hours
Ethylene Glycol	107-21-1	EN374-3	Over 8 Hours
Ethylene Dichloride	107-06-2	EN374-3	Over 8 Hours
Ethylene Oxide	75-21-8	EN374-3	Over 2 Hours
Ethylenediamine tetra-acetic acid tetrasodium salt(EDTA) 5%	64-02-8	EN374-3	Over 8 Hours
Formaldehyde 37 %	79-11-8	EN374-3	Over 8 Hours
Formic Acid 65%	64-18-6	EN374-3	Over 8 Hours
Hexane	110-54-3	EN374-3	Over 7 Hours
Hydrazine	302-01-2	EN374-3	Over 8 Hours
Hydrazine 5%	7803-57-8	EN374-3	Over 8 Hours
Hydrochloric Acid 48%	7647-01-0	EN374-3	Over 8 Hours
Hydrofluoric Acid 48%	7664-39-3	EN374-3	Over 8 Hours
Hydrofluoric Acid 48%	7664-39-3	EN374-3	Over 66 Hours
Hydrofluoric Acid 73%	7664-39-3	EN374-3	Over 8 Hours
Hydrogen Chloride Gas	7647-01-0	EN374-3	Over 8 Hours

Chemical	CAS no.	Method	Breakthrough time
Hydrogen Fluoride gas anhydrous	7664-39-3	EN374-3	Over 1 HOUR
Hydrogen Peroxide (10 volume (3%) solution)	7722-84-1	EN374-3	Over 8 Hours
Hydrogen Peroxide (50%)	7722-84-1	EN374-3	Over 8 Hours
Iso-butane	75-28-5	EN374-3	Over 8 Hours
Iso-butane followed by Hydrofluoric acid 71-75%	75-28-5 + 7664-39-3	EN374-3	Over 8 Hours
Iso-propanol (IPA)	67-63-0	EN374-3	Over 8 Hours
Lewisite	541-25-3	NFPA	No permeation detected
m-Cresol	108-39-4	EN374-3	Over 8 Hours
Methanol	67-56-1	EN374-3	Over 8 HOUR
Methyl Ethyl Ketone (M.E.K) 2-Butanone	78-93-3	EN374-3	Over 2 Hours
Methyl Iodide 99%	74-88-4	EN374-3	Over 1.5 Hours
Methyl Methacrylate	80-62-6	EN 369	Over 3 Hours
methyl-1,2-pyrrolidone	872-50-4	EN369	Over 8 Hours
Methylene Chloride Gas	74-87-3	EN374-3	Over 1 HOUR
Monochloroacetic acid	79-11-8	EN374-3	Over 8 Hours
Mustard Gas	505-60-2	NFPA	No permeation detected
Naphalene	91-20-3	EN374-3	Over 8 Hours
N,N-Dimethylaniline	121-69-7	EN374-3	Over 8 Hours
N,N-dimethyl acetamide	127-19-5	EN374-3	Over 8 Hours
Nitric Acid 50%	7697-37-2	EN374-3	Over 8 Hours
Nitric Acid 70% conc	7697-37-2	EN374-3	Over 8 Hours
Nitric Acid Etchant 80/20	7697-37-2	EN374-3	Over 8 Hours
Nitro Benzene	98-95-3	EN374-3	Over 3 Hours
Oleum 40% SO3	8014-95-7	EN374-3	Over 8 Hours
Oxalic Acid saturated solution	6153-56-6	EN374-3	Over 8 Hours
Phenol 50% in Methanol	108-95-2/67-56-1	EN374-3	Over 8 Hours
Phosphoric acid 25%	7664-38-2	EN374-3	Over 8 Hours
Phosphoric acid 75%	7664-38-2	EN374-3	Over 8 Hours
Propylene 1,2 oxide	75-56-9	EN374-3	Over 1 HOUR
Red Fuming Nitric acid	7697-37-2	EN374-3	Oner 4 Hours
Saren Gas	107-44-8	NFPA	No permeation detected
Sodium Cyanide 30wt%	143-33-9	EN374-3	Over 8 Hours
Sodium Hydroxide 40%	1310-73-2	EN374-3	Over 8 Hours
Sodium Hypochlorite 16%	7681-52-9	EN374-3	Over 8 Hours
Styrene	100-42-5	EN374-3	Over 8 Hours
Sulphuric Acid 96%	7664-93-9	EN374-3	Over 8 Hours
Tetrachloroethylene	127-18-4	EN374-3	Over 3 Hours
Tetraethyl Lead (Octel Anti Knock)	78-00-2	EN374-3	Over 8 Hours
Tetrahydrofuran	109-99-9	EN374-3	Over 3 Hours
Toluene	108-88-3	EN374-3	Over 4 Hours
Toluene 2,4 Diisocyanate	584-84-9	EN374-3	Over 8 Hours
Trichloroethane	71-55-6	EN374-3	Over 6 Hours
Trichloroethylene 1,1,2	79-01-6	EN374-3	Over 3 Hours
Triethanol-amine	102-71-6	EN374-3	Over 8 Hours
Triethylene Glycol	112-27-6	EN374-3	Over 8 Hours
Trigonox K-80 Cumyl hydroperoxide 80% / 20% Cumene	80-15-9/ 98-82-8	EN 369	Over 8 Hours
VX	50782-69-9	NFPA	No permeation detected
Xylene	1330-20-7	EN374-3	Over 4 Hours