# **ALPHACHEM X150**



# LIMITED LIFE CHEMICAL COVERALL

Alphachem X150 is a light, durable and cost effective disposable chemical protective garment manufactured using lightweight HDPE fabric. It offers chemical resistance against splashes and sprays of hazardous chemicals in Type 3 and 4 applications.

#### **FEATURES**

- Designed to provide increased wearer comfort, exceptional levels of safety and protection, with superior durability
- Double sleeve system with inner thumb loop
- Improved fit, enhanced freedom of movement with two piece crotch pattern
- 3 piece hood ensures a comfortable fit
- Nouble zip / grab tag easier to hold when wearing gloves
- Knee patches give extra re-enforcement where it's needed most
- Stitched and taped seams provide a strong and effective chemical barrier
- Quick and easy donning/doffing
- Elasticated ankles and wrists



### Part Number: X150

# **ORDERING INFORMATION**

#### **CERTIFICATION**







EN1073-2:



EN13034: 2005+A1:2009

**SUITABLE APPLICATIONS** 

# **Recommended applications include:**

- **Agriculture**
- **Chemical Spills**
- **Decontamination Work**
- **Pest Control**
- **Plant Maintenance**
- **Pressure Cleaning**
- **Tank Cleaning**

#### STORAGE AND MAINTENANCE

AlphaChem X150 is manufactured from materials made from polypropylene and polyethylene. These inert polymers are proven not to degraded within 10 years. Therefore a product shelf life of 10 years should be reasonable in correct storage conditions. It is advised to keep products stored in cool, dry areas where possible and away from direct heat and sunlight.





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# **TECHNICAL SPECIFICATIONS**

Fabric Physical Tests according to EN 14325: 2004				
Test Method	Result	EN Class		
Abrasion Resistance EN530 Method 2	>100 <500 cycles	2 of 6		
Flex ISO 7854 Method B	>100 <2,500 cycles	1 of 6		
Tear Resistance EN ISO 9073-4 (MD)	85.5 N	4 of 6		
Tear Resistance EN ISO 9073-4 (CD)	39.1 N	2 of 6		
Tensile Strength ISO 13934-1 (MD)	140.0 N	3 of 6		
Tensile Strength ISO 13934-1 (CD)	61.0 N	2 of 6		
Puncture Resistance EN 863 11.0 N	11.0 N	2 of 6		

Other Physical Performance Data				
Description	Result			
BS EN 20811 Resistance to Water Penetration	>22 kPa			
ISO 13938-1 Bursting Resistance	61.6 kPa Class 1 of 6			
EN 25978 Resistance to Blocking	No Blocking			
EN1149-5: 2018 Electrostatic Surface Resistance	PASS - Half Decay t50 = 0.05s			
EN 14362-1 Arylamines derived from Prohibited Azo Dyes	None Detected			
EN ISO 3071:2006 pH of Aqueous Extract	PASS			

Fabric Chemical Permeation EN 374-3: 2003 1.0 μg / cm² / min				
Chemical	Result	EN Class		
Sulphuric Acid 98% Material	>480 min	6 of 6		
Sodium Hydroxide 48% Material	>480 min	6 of 6		
Sulphuric Acid 98% Taped Seam	>480 min	6 of 6		
Sodium Hydroxide 48% Taped Seam	>480 min	6 of 6		

Other Physical Performance Data							
Chemical Permeation Data	Additional Tests						
Chemical	CAS Number	Generic Representation	MDPR µg/cm2/min	BDT Minutes	SBT (Minutes) 1.0µg/cm2/min	NBT(Minutes) 1.0µg/cm2/min	EN Class
Acetone (99.9 wt%)*	67-64-1	Ketone	0.02	>480	>480	>480	6 of 6
Acetonitrile (99.99 wt%)*	75-05-8	Nitrile Compound	0.02	>480	>480	>480	6 of 6
Ammona Hydroxide (25% wt%)	1336-21-6	Aqueous Ammonia	0.04	<1	<1	<2	0
Acrylic Acid (90%v/v)	79-10-7	Unsaturated Organic Acid	0.05	7	11	51	2 of 6
Diesel Fuel >99wt%	68334-30-5	Hydrocarbon Liquid	0.05	6	8	16	1 of 6
Hydrochloric Acid 37wt%	7647-01-0	Inorganic Acid	0.05	183	381	425	5 of 6
Hydroflouric Acid 48-51wt%*	7664-39-3	Inorganic mineral acid	0.03	36	372	>480	6 of 6
Hydroflouric Acid 58-62wt%*#	7664-39-3	Inorganic mineral acid	0.03	9	88	419	5 of 6
Isopropyl Alcohol (99.99 wt%)*	67-63-0	Secondary Alcohol	0.02	>480	>480	>480	6 of 6
Kerosene	8008-20-6	Hydrocarbon Liquid					EBT>480mins
Methanol (99.99 wt%)*	67-56-1	Primary Alcohol	0.06	>480	>480	>480	6 of 6
Nitric Acid (60wt%)	7697-37-2	Inorganic mineral acid	0.03	5	353	>480	6 of 6
Phenol (liquified 89% in water)	108-95-02	Aromatic Organic	0.02	>480	>480	>480	6 of 6
Phosphoric Acid > 85wt%	7664-38-2	Inorganic Acid	0.05	>480	>480	>480	6 of 6
Potassium Hydroxide (80%wt%)	1310-58-3	Inorganic alkali	0.005	>480	>480	>480	6 of 6
Sodium Hydroxide (48wt%)*	1310-73-2	Inorganic alkali				>480	6 of 6
Sodium Hypochlorite (10-15% Active Cl)*	7681-52-9	Liquid Bleach	0.05	>480	>480	>480	6 of 6
Sulphuric Acid (98 wt%)*	7664-93-9	Inorganic mineral acid				>480	6 of 6
Titanium Tetrachloride (99.5wt%)	7550-45-0	Inorganic volatile liquid	0.08	-	2	7	0
Titanyl Chloride (<32wt%)	13780-39-7	Reducing Agent	0.08	>480	>480	>480	6 of 6

MDPR = Minimum Detectable Permeation Rate

BDT = Breakthrough detectable Permeation Rate
BDT = Breakthrough detection time (c first appearance at the minimum detectable permeation rate) ASTM F739-12
SBT = standardized breakthrough time (at 0.1 ug/cm2/min). ASTM F739-12
NBT = Normalized breakthrough time (at 1.0 ug/cm2/min). EN 16523-1:2015
The permeation data published have been generated by independent accredited testing laboratories according to the specified test methods. The data is typically the average of three fabric samples tested unless otherwise stated
\*Denotes tests also carried out on seam and results equivalent to or greater than material, only, test results.
# Denotes mean of six measured samples.

	EN 14126: 3	2007 - Barr

EN 14126: 2003 - Barrier to Infective Agents				
Test Method	Result	EN Class		
ISO 16603 - Resistance to penetration by blood/fluids under pressure	Pass to 20 kPa	6 of 6		
ISO 16604 - Resistance to penetration by blood borne pathogens	Pass to 20 kPa	6 of 6		
EN ISO 22610 - Resistance to wet bacterial penetration (mechanical contact)	Penetration >75 mins No Penetration	6 of 6		
ISO/DIS 22611 - Resistance to biologically contaminated aerosols)	Penetration Ratio Log 10 CFU >5 No Penetration	3 of 3		
ISO 22612 - Resistance to dry microbial penetration	Penetration Log Log10 CFU < 1 No Penetration	3 of 3		

