## esko

Foldaway hood in collar, long zip closures under flap with 'touch and close' fastening

Flexothane fabric—one of the most breathable reusable chemical spray suits on the market

> Kimono sleeves, elasticated cuffs

Stretchable, noiseless, supple, extended durability, comfortable and lightweight

100% waterproof and windproof



# EXOTHANE

**PRODUCT CODE: ESSCG** 

High quality breathable chemical protection suit, sizes M-7XL





Type 4



2006





**PERFORMANCE FEATURES** 

- Flexothane fabric—one of the most breathable reusable chemical spray suits on the market
- Foldaway hood in collar, long zip closures under flap with 'touch and close' fastening
- One inside pocket
- Kimono sleeves, elasticated cuffs
- Elasticated waist in the back
- 100% waterproof and windproof
- High frequency welded seams
- Legs adjustable by press studs
- Stretchable, noiseless, supple, extended durability, comfortable and lightweight
- Sizes: M-7XL

#### **FABRIC**

+ Flexothane Classic: 100% knitted nylon tricot with PU coating: ± 180 g/  $m^2$ 

#### **CARE INSTRUCTIONS**



Wash with restricted agitation at maximum temperature of 40°C



Do not use bleaching agents



Drip dry, do not tumble dry



Do not iron



Dry cleaning allowed with perchlorethylene - restricted movement

- For optimal protection and maximum lifetime of the protective garment it is advisable to remove chemical residue as soon as possible
- Before taking off the protective garment (PPE) after use, it is advisable to take a shower in order to rinse chemicals and ensure there will be no contact with any remaining chemicals on the surface of the garment

#### **APPROVALS**

- EN 14605: 2005 + A1:2009 Type 4
- EN 14786:2006
- EN 343:2003 + A1:2007

#### **SUITABLE FOR**

- Agriculture/horticulture
- Utilities
- Chemical handling
- Oil and gas
- Decontamination
- **Emergency services**

### STORAGE INSTRUCTIONS

The garment should be stored without crushing in a cool and non humid area. Do not store when wet.



#### **TECHNICAL DATA**

Esko ESSCG Charente Chemical suit complies with the prescriptions of European Directive 89/686/EEG for Personal Protective Equipment (PPE).

By achieving certification it is proven that the clothing meets the harmonised norm EN14605:2005 type 4 (Protective Clothing Against Liquid Chemicals, Performance Requirements for Clothing with Spray-tight (type 4) Connections) and EN14786:2006 (Protective Clothing, Determination of Resistance to Penetration by Sprayed Liquid Chemicals, Emulsions and Dispersions, Atomizer Test). The garment conforms to EN343:2003+A1:2007 (Protective Clothing, Protection Against Rain) and EN340:2003 (Protective Clothing, General Requirements).

Certification (0493) is by Centexbel, Technologiepark 7, B-9052 Zwijnaarde, Belgium. The garment is produced in a factory certified to an EC-quality guarantee system of production with supervision (type 11B).

#### **EN14605:2005 TYPE 4: TEST RESULTS**

Garment Performance Test Results				
	Class			
RESISTANCE AGAINST				
- abrasion	5/6			
- flexion	6/6			
- Tearing trapezoidal				
warp	5/6			
weft	4/6			
- Traction				
warp	5/6			
weft	4/6			
- perforation	2/6			
RESISTANCE OF SEAMS	4/6			

Chemical permeation tests have been carried out on new, unused material according to test method EN369. The permeation tests have been carried out in a controlled environment at  $20^{\circ}\text{C}$  with relative humidity of  $65^{\circ}$ %.

Breakthrough time was measured after an uninterrupted exposure to chemicals. This time is not necessarily equal to the summation of several short periods of exposure.

Resistance to permeation is divided into the following classes:

Permeation Classes						
Class	1	2	3	4	5	6
Breakthrough time (min)	10	30	60	120	240	480

Inorganic acids  Hydrocarbons / oils  Sulphuric acid 20% 6 Crude oil 4  Sulphuric acid 95 % / Petroleum 2  Hydrochloric acid 6 Gasoline 1  10% hydrochloric acid / Machine oil 6  37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6  Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Permeation Test Results				
Sulphuric acid 20% 6 Crude oil 4  Sulphuric acid 95 % / Petroleum 2  Hydrochloric acid 6 Gasoline 1  10% hydrochloric acid / Machine oil 6  37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6  Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6		Class		Class	
Sulphuric acid 95 % / Petroleum 2  Hydrochloric acid 6 Gasoline 1  10% hydrochloric acid / Machine oil 6  37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6  Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Inorganic acids		Hydrocarbons / oils		
Hydrochloric acid 6 Gasoline 1  10% hydrochloric acid / Machine oil 6  37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6  Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Sulphuric acid 20%	6	Crude oil	4	
10% hydrochloric acid / Machine oil 6 37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6 Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6 Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Sulphuric acid 95 %	/	Petroleum	2	
37% nitric acid 10% 3 Organic acids  Detergents, anionic alkali 6 Acetic acid 50% 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6 Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Hydrochloric acid	6	Gasoline	1	
Detergents, anionic alkali 6 Acetic acid 50% 6  Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	10% hydrochloric acid	/	Machine oil	6	
Ammonia aq. 25 % 6 Other products  Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6  Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	37% nitric acid 10%	3	Organic acids		
Sodium hydroxide 50% w/w 4 Hydrogen fluoride 40% 6 Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Detergents, anionic alkali	6	Acetic acid 50%	6	
Sodiumhydroxide 10% w/w 5 Hydrogen peroxide H <sub>2</sub> O <sub>2</sub> 6	Ammonia aq. 25 %	6	Other products		
	Sodium hydroxide 50% w/w	4	Hydrogen fluoride 40%	6	
On disease bear a ship side (400 m/l)	Sodiumhydroxide 10% w/w	5	Hydrogen peroxide H <sub>2</sub> O <sub>2</sub>	6	
Sodium hypochloride (120 g/l) 2			Sodium hypochloride (120 g/l)	2	
Chlorine /			Chlorine	/	

Permeation test results are not valid for any gloves, boots, etc which are not part of the garment.

This protective garment is not considered suitable to give protection against solvents. As an indication we give the breakthrough times of some solvents.

Solvent	Breakthrough time (min)	Class
n-Hexane	4.2	/
Dichlormethane	0.8	/
Diethylamine	0.2	/
Methanol	0.6	/



This garment offers protection against pesticides and herbicides; tested in accordance with EN 14786:2006 (Atomizer Test) to resist permeation by sprayed liquids, emulsions and dispersions.

Flexothane offers resistance to the following pesticides and herbicides:

Commercial name	Formula	Material	% solid in product	% solid in spray liquid	% product in spray liquid	Manufacturer
U46-D-Fluid 0941-00	SL	2,4-D-DMA-Salz	500 g/l	2400 mg/l	5 ml/l	BASF
Pirimor Granulat 2470-00	WG	Pirimicarb	500 g/kg	750 mg/l	1,5 g/l	Syngenta
Amistar 5090-00	SC	Azoxystrobin	250 g/l	1250 mg/l	5 ml/l	Syngenta
Betanal Expert 4991-00	EC	Phenmedipham	75 g/l	560 mg/l	7,5 ml/l	Bayer/Crop- Science
Folicur 4028-00	EW	Tebuconazole	250 g/l	1250 mg/l	5 ml/l	Bayer/Crop- Science

Under the EN 343 standard for workwear for protection from rain, garments are judged on performance in two categories. The first (X) judges its ability to protect against precipitation, fog and humidity, the second (Y) measures breathability. They are rated from one to three in these categories, with three representing the highest level of performance.



- X Water Penetration Resistance
- Y Breathability

Waterproofness is tested on new pretreated fabric and on seams.

The following table is a guide to illustrate the effect of water vapour permeability on the recommended continuous wearing time of a garment in different ambient temperatures.

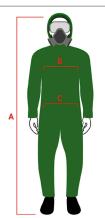
Temperature of working environment °C		20	15	10	5
Recommended max continuous wearing time	60	75	100	240	-

#### **TO ENSURE SAFE USE:**

- Read the information and safety brochure of the chemical products you are going to work with
- Check if the size of the protective garment and the type of protection of the garment is suitable for you (see sizes on measuring table)
- Check before each use that there is no visual damage on the garment: holes or tears, softening, perishing, delamination, discolouring, cracking of the coating, or loss of flexibility etc. If there are any doubts about the effectiveness of the garment it must be replaced
- When donning the protective garment it is recommended that a second person should check that everything is adjusted and sealed as it should be.
- Read also any applicable manuals of other additional protective equipment you are using (gloves, masks etc) in order to guarantee a combination with the garment of maximum protection.

#### **SIZING GUIDE**

Spray Suit Measurements (cm)					
height	Height - A	Chest - B	Waist - C		
М	172 - 180	94 - 102	82 - 90		
L	172 - 180	102 - 110	90 -98		
XL	180 - 188	110 - 118	98 - 106		
2XL	180 - 188	118 - 129	106 - 117		
3XL	188 - 196	129 - 141	117 - 129		
4XL	188 - 196	141 - 153	129 - 141		
5XL	188 - 196	153 - 165	141 - 153		
6XL	188 - 196	165 - 177	153 - 165		
7XL	188 - 196	177 - 189	165 - 177		



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