

# GTL-ESD

## DISPOSABLE GAS TIGHT SUIT



RESPIREX™

Water  
Companies

Shipping

Nuclear

Health  
Authorities

Petrochemical

Fire Brigades

Civil Resilience

Pharmaceutical

The fully encapsulating GTL is a Type 1A - ET limited-life gas-tight suit designed to protect the emergency responder against toxic, corrosive gases, liquids and solid chemicals.

The GTL suit is manufactured in Chemprotex™ 400, a high performance multi-layer nonwoven chemical-barrier fabric, in a high visibility yellow colour. This suit represents the latest in gas suit protection and is lighter in weight than limited life suits currently available.

- Electro-Static Dissipative construction enables the suit to be used in potentially explosive (ATEX) atmospheres - see ATEX zone details below
- Fully encapsulating design for breathing apparatus worn inside the suit
- Heavy duty 122cm (48") long gas tight zip, fitted to the right hand side of the suit - flap with a hook and loop fastener fitted to cover the teeth of the zip
- Adjustable internal support belt and bat-wing sleeves for optimal wearer comfort
- Flexible, multi-laminated, anti-mist visor giving clear undistorted vision
- Two covered exhalation valves maintain a comfortable working pressure inside the suit
- Seams welded and taped for maximum performance
- Kemblok™ chemically protective laminated inner glove welded to the suit material with an elasticated over sleeve to prevent splash entering the attached Honeywell® Butoject® outer gloves
- Integral sock feet with conductive pads and outer splash guard legs - must be used with ESD footwear in ATEX environments, e.g. Hazmax™ FPA ESD boots
- Ten year total shelf life; The first seven years are maintenance free, with the option to extend the suits shelf life to ten years with a visual inspection and pressure test at year seven
- Tested to EN 1073-2:2002, Class 3 with an NPF >9090
- Tested to EN 464 prior to despatch for leak-tightness



### Certification



TYPE 1A

EN 943-2:2002(ET)

Material tested for the 15 chemicals listed in EN 943-2:2002(ET)

### Material Resistance



FINABEL 0.7.C

Chemical Warfare Agents



EN 14126:2003

Protective Clothing Against Infective Agents

### ATEX Zones

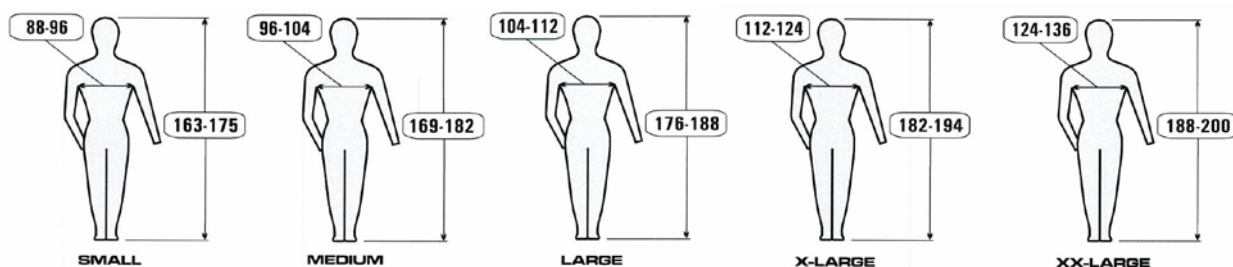


Tested in accordance with EN IEC 60079-32-2:2015 and CEN/CLC/TR 16832:2015 for use in the following ATEX environments:

Dust Ex atmospheres: **ZONES 20, 21 & 22**Gas Ex atmospheres: **ZONES 1 & 2**

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## Sizing



## Material Physical Properties

Property	Test Method	Property value of Chemprotex™ 400	Performance Class of	Minimum Class Required For EN943-2:2002
Abrasion resistance	EN 530:2010 Meth 2 (inc. pressure drop)	2,000 cycles	6	4
Flex cracking resistance	EN ISO 7854:1997 Method B (inc. pressure drop)	Machine Direction 1,000 cycles Cross Direction 1,000 cycles	1	1
Flex cracking resistance at low temperatures (-30°C)	EN ISO 7854:1997 Method B at -30°C (inc. pressure drop)	Machine Direction 200 cycles Cross Direction 200 cycles	2	2
Trapezoidal tear resistance	EN ISO 9073-4:1997	Machine Direction 99N Cross Direction 74N	4	3
Puncture resistance	EN 863:1995	27N	2	2
Tensile strength	EN ISO 13934-1:1999	Machine Direction 451N Cross Direction 376N	4	4
Resistance to flame	EN 13274-4:2001 Method 3 modified (inc. pressure drop)	No part ignited or continued to burn on removal from the flame	1	1
Seam strength	EN ISO 13935-2:1999	>300N	5	5

Material tested in accordance with Table 1 of EN 943-2:2002 - Minimum performance requirements of chemical protective clothing materials for limited-use suits.

## Material Permeation Performance

Chemical	Physical State	Chemprotex™ 400	Suit Seams	Kemblok™ Glove	Visor
Acetone	liquid	>480	>480	>480	>480
Acetonitrile	liquid	>480	>480	>480	>480
Ammonia	gas	>480	>480	>480	>480
Carbon Disulphide	liquid	>480	>480	>480	>480
Chlorine	gas	>480	>480	>480	>480
Dichloromethane	liquid	>480	>480	>480	>480
Diethylamine	liquid	>480	>480	>480	>480
Ethyl Acetate	liquid	>480	>480	>480	>480
n-Heptane	liquid	>480	>480	>480	>480
Hydrogen Chloride	gas	>480	>480	>480	>480
Methanol	liquid	>480	>480	>480	>480
Sodium Hydroxide 40%	liquid	>480	>480	>480	>480
Sulphuric Acid 98%	liquid	>480	>480	>480	>480
Tetrahydrofuran	liquid	>480	>480	>480	>480
Toluene	liquid	>480	>240	>480	>480

All tests carried out under laboratory conditions by independent accredited laboratories in accordance with EN ISO 6529:2001 unless otherwise stated. Table shows average breakthrough times in minutes.

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