



**MICROCHEM®**  
**6000-GTS**

**MICROCHEM®**  
**6000-GTB**

**Gas-Tight**  
Chemical Protective Clothing

  
**MICROGARD®**  
High Performance Protection in Comfort

# MICROCHEM® 6000 Gas-Tight

## Features & Benefits

**Fabric technology** - Co-extruded multi-layer high performance barrier laminate with scrim reinforcement.

**Lightweight** - Flexible and yet incredibly strong material with an excellent barrier to numerous hazardous chemicals.

**Highly visible** - Bright orange colour for improved worker safety.

**Protection** - >480mins for 15 chemicals specified by EN 943-2:2002.

**Design** - Feature includes a DYNAT/YKK Gas-Tight zipper that provides protection and performance in the most hostile of chemical environments.

**Visor technology** - Semi-rigid 3 layer PET visor providing excellent optical clarity.

**Seam technology** - Ultrasonically welded and hot air taped.



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**MICROCHEM® 6000 Gas-Tight Suits** provide protection for emergency responders or chemical workers against dangerous and toxic chemicals in either liquid or gaseous form. MICROCHEM® 6000 GTS and GTB are Type 1a suits where self-contained breathing apparatus (SCBA) is worn on the inside.

The lightweight and flexible, yet incredibly strong material provides an excellent barrier to a wide range of chemicals encountered in extremely hazardous environments. The highly visible innovative material meets the requirements for EN 943-1 and EN 943-2 limited-use suits.

**MICROCHEM® 6000 Gas-Tight range includes:**

**GTS** - Gas-Tight suits with socks and boot overflaps

**GTB** - Gas-Tight suits with attached wellington boots



**Applications**

- Chemicals
- Petrochemicals
- Pharmaceuticals
- First response
- Fire service
- Industrial and tank cleaning
- Sewage purification installations
- Health service
- Nuclear
- CBRN
- Shipping



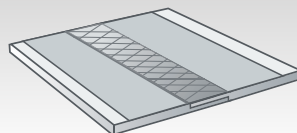
**Protection Levels**

**Type 1a** EN 943-1:2002

**Type 1a-ET** (Limited use) EN 943-2:2002

**Ultrasonically Welded & Taped Seams**

A feature throughout the MICROCHEM® 6000 range, this seam technology is our highest barrier to liquids and particulates.



# MICROCHEM® 6000 Gas-Tight

## FEATURES & BENEFITS



**Semi-rigid 3 layer PET visor**  
Provides a wide field of vision with free head movement and enough head room for use with a safety helmet.

Anti-Fog Wipe Included



**DYNAT/YKK Gas-Tight zipper**  
Provides protection and performance in the most hostile of chemical environments. The zip has an outer zip flap made of the same material as the suit and velcro fastening.

### GLOVE OPTIONS

**GA1**  
Interchangeable locking cuff for dual glove system (e.g. Ansell Barrier® + Neoprene).

GA1

G02

**G02**  
Permanently attached Ansell Barrier® Gloves with sleeve over-cuffs  
An overglove should be worn to provide mechanical strength.

### BOOT / SOCK OPTIONS

**MICROCHEM®**  
**6000**-GTB

GTB

**GTB**  
Permanently attached boots  
Etche wellington boots available.

GTS

**MICROCHEM®**  
**6000**-GTS

**GTS**  
Attached socks with boot overflaps  
Must be worn with a suitable wellington boot.

MICROCHEM®  
**6000**-GTS

MICROCHEM®  
**6000**-GTB



Two MICROCHEM® exhalation valves fitted in the hood.

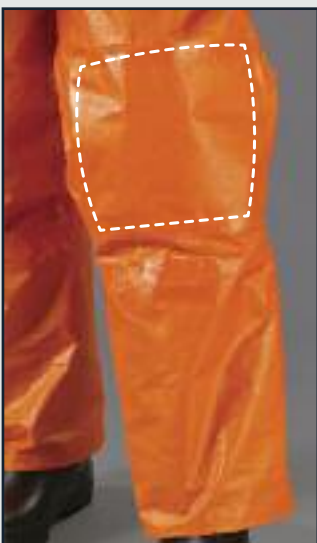
**Expanded Back**

Compatible with single and twin-cylinder SCBA.



**Pass-Thru option available**

For connection to the second person attachment on SCBA, for emergency use or to supplement air-supply during decontamination.



Reinforced knees



**10 Year Shelf Life**

When stored in accordance with user instructions



**100% Quality Inspected**

All suits are 100% Quality Inspected and pressure tested according to EN 464 prior to despatch



**Protection Levels**

**Type 1a**  
EN 943-1:2002

**Type 1a-ET**  
(Limited use)  
EN 943-2:2002

# MICROCHEM® 6000 Gas-Tight

## HOW TO ORDER

**SUIT FORMULA** - There are various models available to order. You will need to consider each of the options below to build your complete suit structure...



### 1 SOCK / BOOT OPTIONS



GTS

**MICROCHEM®  
6000-GTS**

**Attached socks with boot overflaps**  
Must be worn with suitable wellington boots.



GTB

**MICROCHEM®  
6000-GTB**

**Permanently attached Etche wellington boots**

### 2 PASS-THRU OPTIONAL

For connection to second man attachment or switch over device.

The pass-thru includes:

- 360° connection on the outside of the suit
  - Umbilical hose inside the suit for connecting to the ancillary airline connection on the SCBA
- PLEASE NOTE: The maximum working pressure of the pass-thru is 10 bar.*

### 3 GLOVE OPTIONS

Code	Description
G02	Permanently attached Ansell Barrier Gloves with sleeve over-cuff.
GA1	Interchangeable internal locking cuff system for dual glove set - comprising of Ansell Barrier and Neoprene gloves*.



### 4 SIZING

02 - Small • 03 - Medium • 04 - Large • 05 - XLarge • 06 - 2XLarge • 07 - 3XLarge

When placing an order please use the 2 digit sizing code to replace the **0X** in the order code below.

OR60-TA00-811-04-G02

### GAS-TIGHT SUIT FEATURES

SOCK / BOOT OPTIONS	PASS THRU	GLOVE OPTIONS		ORDER CODE
		G02	GA1	
<b>MICROCHEM® 6000-GTS</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">GTS</span> <b>Attached socks with boot overflaps</b> Must be worn with a suitable wellington boot.		✓		OR60-T-00-801-0X-G02
			✓	OR60-T-00-802-0X-GA1
	✓	✓		OR60-TA00-811-0X-G02
	✓		✓	OR60-TA00-812-0X-GA1
<b>MICROCHEM® 6000-GTB</b> <span style="border: 1px solid black; border-radius: 50%; padding: 2px;">GTB</span> <b>Permanently attached Etche wellington boots.</b>		✓		OR60-T-00-807-0X-G02
			✓	OR60-T-00-808-0X-GA1
	✓	✓		OR60-TA00-817-0X-G02
	✓		✓	OR60-TA00-818-0X-GA1

**PLEASE NOTE: Suits must be worn with self-contained breathing apparatus**

\*External fitting glove locking system is available on request. Contact Microgard Limited customer services: [sales@microgard.com](mailto:sales@microgard.com)

## TECHNICAL DATA

### Physical performance of MICROCHEM® 6000

Property	Test Method	Minimum Performance Class Required For EN943-2:2002	MICROCHEM® 6000 Performance Class
Abrasion resistance	EN 530	4 of 6	6 of 6
Flex cracking resistance	EN ISO 7854	1 of 6	1 of 6
Flex cracking resistance at low temperatures (-30°C)	EN ISO 7854 (-30°C)	2 of 6	2 of 6
Trapezoidal tear resistance	EN ISO 9073-4	3 of 6	3 of 6
Tensile Strength	EN ISO 13934-1	4 of 6	4 of 6
Puncture resistance	EN 863	2 of 6	2 of 6
Resistance to Ignition	EN 13274-4	Pass	Pass
Resistance to flame	EN 13274-4	1 of 3	2 of 3
Seam strength	EN ISO 13935-2	5 of 6	5 of 6

### Chemical permeation testing (Permeation Resistance) EN ISO 6529

Chemical Name	CAS Number	Physical State	MICROCHEM® 6000	GAG Visor	Ansell Barrier Glove*	ETCHE Boot*
			Breakthrough Time (1.0 µg/cm²/min)			
Acetone	67-64-1	Vapour Producing Liquid	>480	>480	>480	>60
Acetonitrile	75-05-8	Vapour Producing Liquid	>480	>480	>480	>60
Ammonia (Gas, 1 atmos.)	7664-41-7	Gas	>480	>480	8**	>60
Butadiene 1,3-	106-99-0	Gas	>480	>480		
Carbon Disulphide	75-15-0	Vapour Producing Liquid	>480	>480	>480	>60
Chlorine (Gas, 1 atmos.)	7782-50-5	Gas	>480	>480	>480	>60
Chloromethane	74-87-3	Gas	>480	>480		
Dichloromethane	75-09-2	Vapour Producing Liquid	>480	>480	59	50
Diethylamine	109-89-7	Vapour Producing Liquid	>480	>480	>480	>60
Dimethylformamide, N,N-	68-12-2	Liquid	>480	>480		
Ethyl Acetate	141-78-6	Vapour Producing Liquid	>480	>480	>480	>60
Ethylene Oxide (Gas, 1 atmos.)	75-21-8	Gas	>480	>480		
Heptane, n-	142-82-5	Liquid	>480	>480	>480	>60
Hydrogen Chloride (Gas, 1 atmos.)	7647-01-0	Gas	>480	>480	246	>60
Hydrogen Cyanide	74-90-8	Liquid	>480	>480		
Methanol	67-56-1	Vapour Producing Liquid	>480	>480	>480	>60
Nitrobenzene	98-95-3	Liquid	>480	>480		
Sodium Hydroxide (40% w/w)	1310-73-2	Liquid	>480	>480	>480	>60
Sodium Hydroxide (50% w/w)	1310-73-2	Liquid	>480	>480		
Sulphuric Acid (95-96% w/w)	7664-93-9	Vapour Producing Solution	>480	242	>480	>60
Tetrachloroethylene	127-18-4	Liquid	>480	>480		
Tetrahydrofuran	109-99-9	Vapour Producing Liquid	>480	>480	>480	>60
Toluene	108-88-3	Liquid	>480	>480	>480	>60

\* Gloves and Boots tested according to EN 374-3. Note: For information on the permeation resistance and mechanical performance of the outer glove please refer to the glove manufacturers instruction for use document. A copy of which is provided with each suit.

\*\* ATTENTION! According to EN 943-2, as Class 2 of 6 was not achieved the glove is not suitable for use against this chemical under continuous exposure. Wearers are therefore advised if continuous exposure to this chemical is expected then an additional outer glove should be selected which achieves at least Class 2 according to EN 943-2 requirements. For advice please contact Microgard Ltd.

## MICROCHEM® chemical database

The MICROCHEM® chemical database is available online and features permeation resistance for a wide range of chemicals, including the ASTM F1001 and EN ISO 6529 recommended list of challenge chemicals.

For up to the minute chemical permeation data visit: [www.microgard.com](http://www.microgard.com)

### PRESSURE TESTING KIT

SOLD SEPARATELY

**MICROCHEM® Gas-Tight Suit Pressure Test/Internal Leakage Test kit**  
(Part Code: AC01-P-00-003-00).

**INCLUDED:**

- Country plug adapters (GB, EU, US & ASIAN).
- 12V vehicle power socket.
- USB lead and Windows compatible software.
- Adaptors for connection to MICROCHEM® 6000 exhalation valves available upon request.
- Tests according to EN 464, ASTM F1052-14 or user specific requirements.
- Requires separate air source (i.e. cylinder or compressor)



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