MICROCHEM® 3000

Applications

- Chemicals
- Oil and petrochemicals
- Pharmaceutical
- Food industry (caustic clean downs)
- Sewage purification installations
- Industrial and tank cleaning
- Mining

MICROCHEM® 3000 is one of the lightest and most comfortable chemical protective materials on the market today. This durable 3 layer fabric provides an extremely effective barrier against both inorganic chemicals and biological hazards.

Features & Benefits

Protection - Multi-layer barrier fabric effective against numerous chemicals

Highly visible - Bright yellow for improved worker safety

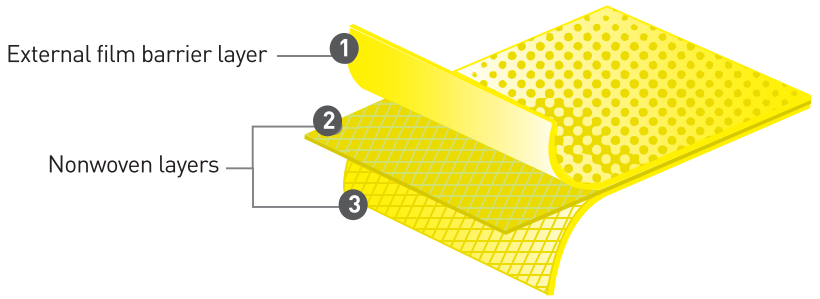
Comfort - Lightweight yet durable

Anti-static - Tested according to EN 1149-1

Designed to protect - Typical coverall features include dual zip systems and double cuffs

MICROCHEM® 3000

One of the lightest and most comfortable chemical protective garments on the market today this durable 3 layer fabric provides an extremely effective barrier against both inorganic chemicals and biological hazards.



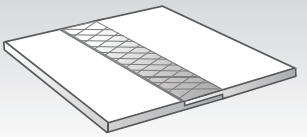
Protection Levels & Additional Properties

TYPE 3-B | TYPE 4-B | TYPE 5-B | EN 1073-2 | EN 1149-1 | EN 14126

Ultrasonically Welded Seams

Provides a strong liquid and particle barrier

(MICROCHEM® 3000 PAPR features welded and taped seams)



Innovative Design Features

Double zip system helps ensure a liquid tight seal without the need for additional taping

Double cuff design to enable a spray-tight connection with chemical protective gauntlets (additional taping or Glove Link is required)

Specialist Approvals

MICROCHEM® 3000 has passed a range of specialist testing methods including:

Biological Agents
EN14126 : 2003
See page 9

Suitable for Ex-Zones
See page 10

Technical Support

Contact the Microgard technical team to discuss facilitating independent permeation testing of your specific chemical or chemical mixture

Email: **technical@microgard.com**

Technical datasheets & product flyers available to download at: **www.microgard.com**

MICROCHEM® 3000 Range Overview

MICROCHEM® 3000

Protection against concentrated inorganic chemicals & biological agents.

▲ MICROCHEM® 3000

MICROCHEM® 3000 PAPR

Encapsulated suit for use in conjunction with Sundström SR500 / SR500EX PAPR fan unit & filters.

▲ MICROCHEM® 3000 PAPR - See page 35

MICROCHEM® 3000

MICROCHEM® 3000 Technical Data

MICROCHEM® 3000 is extensively tested in accordance with statutory requirements, including physical performance attributes and barrier to hazardous substances. The following tables outline the results obtained in independent laboratories according to European test methods.

Test Method	Result	EN Class (EN14325)
EN 530 Abrasion	500 cycles	3 of 6
EN ISO 7854 Flex Cracking	100,000 cycles	6 of 6
EN ISO 9073-4 Tear Resistance (Machine Direction)	44N	2 of 6
EN ISO 9073-4 Tear Resistance (Cross Direction)	29N	
EN ISO 13934-1 Tensile Strength (Machine Direction)	109N	2 of 6
EN ISO 13934-1 Tensile Strength (Cross Direction)	62N	
EN 863 Puncture Resistance	10N	2 of 6
EN ISO 13938-1 Burst Resistance	90kPa	2 of 6
EN 13274-4 Resistance to ignition	Pass	-
EN 1149-1 Electrostatic Properties (Surface Resistivity)	‹5.0 x 10^{10}	-
ISO 13935-2 Seam Strength	›125N	4 of 6

MICROCHEM® 3000 has been tested against over 100 chemicals. For further information on permeation testing and a more extensive list of chemicals see page 55 onwards.

EN ISO 6529 Chemical Permeation Test Results			
Chemical Name	**CAS Number**	**BT at 1.0µg/cm²/min**	**EN Class (EN 14325)**
Acetic Acid Glacial	64-19-7	›540	6 of 6
Ethylene Glycol	107-21-1	›480	6 of 6
Formic Acid 90%	64-18-6	›480	6 of 6
Hydrazine monohydrate 98% (containing Hydrazine, 64-65 wt %)	7803-57-8	›540	6 of 6
Hydrochloric Acid 37%	7647-01-0	›540	6 of 6
Hydrogen Peroxide 35%	7722-84-1	›480	6 of 6
Isopropyl Alcohol	67-63-0	›480	6 of 6
Mercury	7439-97-6	›480	6 of 6
Methanol	67-56-1	›480	6 of 6
Perchloric Acid 30%	7601-90-3	›540	6 of 6
Sodium Hydroxide (40%)	1310-73-2	›540	6 of 6
Sodum Hypochlorite	7681-52-9	›480	6 of 6
Sulphuric Acid (96%)	7664-93-9	›540	6 of 6

MICROCHEM® 3000 when tested in accordance with EN 14126: 2003 demonstrates an excellent barrier to infective agents. The specific test results are detailed in the table below and for further information on this European Norm see page 7.

EN14126 Barrier to Infective Agents	Result	EN Class
ISO 16603 Resistance to penetration by blood/fluids under pressure	Pass to 20kPa	Class 6 of 6
ISO 16604 Resistance to penetration by blood borne pathogens	Pass to 20kPa	Class 6 of 6
EN ISO 22610 Resistance to wet bacterial penetration (mechanical contact)	No penetration (up to 75 mins)	Class 6 of 6
ISO/DIS 22611 Resistance to biologically contaminated aerosols	No penetration	Class 3 of 3
ISO 22612 Resistance to dry microbial penetration	No penetration	Class 3 of 3

MICROCHEM® 3000 products have been extensively tested according to European and International requirements, including ASTM, for both physical and barrier performance. More details can be found on our website **www.microgard.com**

MICROCHEM® 3000 Coverall Models

Model 103

Suit Features
- Collar
- Double zip closure
- Double cuffs
- Elasticated waist, double cuffs and ankles

Sizes: S-3XL
Colour: Yellow

Model 111

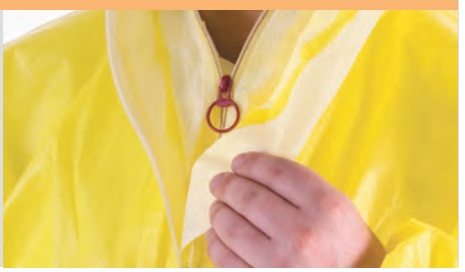
Suit Features
- 2 piece hood
- Double zip closure
- Double cuffs
- Elasticated hood, waist, double cuffs and ankles

Sizes: S-3XL
Colour: Yellow

Model 121

Suit Features
- 2 piece hood
- Double zip closure
- Elasticated hood, waist, ankles and sleeve over cuffs
- Attached Ansell Barrier Gloves

Sizes: S-3XL
Colour: Yellow



Model 122

Suit Features
- 2 piece hood
- Double zip closure
- Elasticated hood, double cuffs and waist
- Integrated socks with boot overflap

Sizes: S-3XL
Colour: Yellow