

Protective Clothing according to EN 14126:2003 - Protection from Infective Agents



Protective Clothing against infective agents has two main functions...

- to prevent infective agents from reaching the (possibly injured) skin
- to prevent the spreading of infective agents to other people and other situations, e.g. eating or drinking, when the person has taken their protective clothing off

In many work situations, i.e. microbiological laboratories, the infective agents can be contained and the risk of exposure limited to the occurrence of an accident.

However, in other types of work, i.e. sewage & waste water treatment, caring for infected animals, emergency clean-up; the organisms cannot be contained, exposing the worker continuously to the risk of infection by biological agents. In these situations the biological agents the worker is exposed to may not be known.

Applications where workers can be exposed to biological agents

- Waste water treatment works, sewage systems work
- Agriculture
- Food Industry
- Healthcare, hospitals, emergency services
- Clinical, veterinary laboratories
- Refuse disposal plants
- Activities where there is contact with animals and/or products of animal origin

Micro-organisms are a very heterogeneous group in that they come in all shapes and sizes, and their living conditions, survival abilities etc. vary widely. A distinction is made between four risk groups according to the risk of infection for humans. Details of these risk groups, along with their containment measures are found in European Directive 2000/54/EEC (on the protection of workers from the risk related exposure to biological agents at work).

EN 14126:2003

Due to the heterogeneity of micro-organisms, it is not possible to define performance criteria of protective clothing on the basis of risk groups, nor on the type of micro-organism. Also it may not be possible to define exactly the organisms the worker is exposed to. Hence the test methods in EN 14126:2003 focus on the medium containing the micro-organism, such as liquid, aerosol or a solid dust particle.

In accordance with the requirements of EN 14126:2003 protective clothing should be certified as Category III and subjected to 5 test methods specified in the standard. The corresponding protective clothing "Type" is then prefixed with the letter "B" (e.g. Type 3-B) and the biohazard symbol is displayed. (See page 8)

For a copy of the Microgard Guide to EN 14126:2003 please visit www.microgard.com

Microgard EN 14126 Approved Product Range

Microgard Product	Protection against biologically contaminated dust	Protection against biologically contaminated liquids	Tasks	Risk Groups	Risk Group & Task Definition
MICROGARD® 2000 STANDARD	✓	✓*	A/B	1-2	Risk Group 1. Biological agent unlikely to cause sickness in humans 2. Biological agent that could cause sickness in humans and represent a danger to employees; substance dispersal amongst the population is unlikely; effective preventive measures or treatment is normally possible 3. Biological agent that can cause severe illness in humans and represent a serious risk for employees; a risk of dispersal amongst the population may occur but effective preventive measures or treatment are normally possible 4. Biological agent that causes severe illness in humans and represents a serious risk for employees; the risk of dispersal amongst the population is high under some circumstances; effective preventive measures or treatment are not normally possible. Tasks A. Routine inspection = no contact with contaminated material or objects; B. Handling and disposal of possibly contaminated material, objects or animals; C. Performed tasks require application of cleaning and disinfecting chemicals
MICROGARD® 2000 Ts PLUS	✓	✓	A/B	1-3	
MICROGARD® 2300 PLUS	✓	✓	A/B/C	1-4	
MICROGARD® 2500 STANDARD & PLUS	✓	✓	A/B	1-3	
MICROCHEM® 3000	✓	✓	B/C	1-4	
MICROCHEM® 4000	✓	✓	B/C	1-4	
MICROCHEM® 5000	✓	✓	B/C	1-4	

*MICROGARD® 2000 STANDARD includes bound seams which carry a higher risk of liquid ingress under pressure than the taped seams of MICROGARD® 2000 Ts PLUS. Therefore this should be taken into consideration when carrying out a risk assessment for PPE usage to ensure that the right garment is selected and is fit for purpose.

It is the user's responsibility to select an appropriate garment, gloves, boots, and other equipment for the particular use and to understand all warnings and information provided. For further information on Microgard products please visit www.microgard.com or e-mail sales@microgard.com