

COMPREHENSIVE GUIDE TO  
**InSpec® Alcohols,  
Disinfectants,  
Sporicides &  
Cleaning Detergents**

Plus Cleaning Techniques  
for Wiping and Mopping  
in GMP Environments

## Introduction to Redditch Medical

Redditch Medical's **InSpec®** products are manufactured in our Sedgefield site in County Durham. This site is located within the NETPark Discovery 2 Building, a new technology centre for the manufacture of GMP Pharmaceutical products. Situated a short drive from Newcastle Airport, major rail routes and the A1M. NETPark has strong links with the University of Durham and the local innovation community.



On the 2,000m<sup>2</sup> site we have two ISO 6 Cleanroom facilities of 80m<sup>2</sup> and 100m<sup>2</sup>. These are purpose-built and dedicated to biocide manufacture and have been designed with good process flow and critical product manufacture in mind.

There are EN ISO Class 5 localised air shower facilities located within an ISO 6 environment for critical liquid filling and contract packing for pharmaceutical and medical device industries.

The facility also has a dedicated ATEX blending room, preparation areas and houses a WFI quality water system (Water for Injection) enabling high volume production of 1Ltr, 5Ltr, 500ml, 100ml and burstable wipes - both sterile and non-sterile variants.



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## InSpec® Biocides

# Modes of Action

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Redditch Medical has a comprehensive range of disinfectants and sporicides - it is important to understand the 'mode of action' of each chemistry.

**InSpec® IPA** - Isopropyl Alcohol & Denatured Alcohol (TSDA 7)  
**Role: Disinfectant**  
**Mode of action: denaturation of proteins**

Alcohols are most effective when combined with water which facilitates diffusion through the cell membrane; 100% alcohol typically denatures only external membrane proteins. A mixture of 70% ethanol or isopropanol v/v diluted in water is more effective in denaturing protein and is effective against a wide spectrum of bacteria and fungi. **InSpec® IPA** and **InSpec DE** - Isopropyl alcohol and Denatured alcohol.

**InSpec® HPX** - Hydrogen peroxide with surfactant  
**Role: Disinfectant/sporicide & cleaner**  
**Mode of action: oxidation of cellular components**

Hydrogen peroxide produces destructive hydroxyl free radicals that attack membrane lipids, DNA, and other essential cell components. Hydrogen peroxide decays to water and oxygen. The provision of surfactants in **HPX** adds both cleaning ability and reduces the surface tension of the solution aiding contact and penetration.

**InSpec® OX** - Hydrogen peroxide with Peracetic acid  
**Role: Disinfectant/sporicide**  
**Mode of action: oxidation of cellular components**

It is well understood that in combination Hydrogen peroxide and Peracetic acid act synergistically to significantly improve bactericidal and sporicidal activity relative to those of either agent used separately.

**InSpec® QT & QT+** - Quaternary ammonium compound  
**Role: Disinfectant & cleaner**  
**Mode of action: inactivation of enzymes, denaturation of cellular proteins & disruption of the cell membrane.**

Quaternary ammonium compounds are cationic detergents, as well as disinfectants which assists in cleaning ability and enhances contact with micro-organisms. **QT+** has additional sequestrants improving the activity of the quaternary ammonium compounds allowing the concentration to be reduced whilst maintaining the same performance so reducing residue levels.

**InSpec® AN** - Diamine  
**Role: Disinfectant & cleaner**  
**Mode of action: increases the permeability of the bacterial cell membrane, leading to osmotic imbalance / loss of amino acids leading to cell inactivation.**

To enhance penetration and provide a cleaning ability surfactants are added to **InSpec AN**. Diamines are characterized by relatively low toxicity to mammals at ready to use concentrations. Consequently they are low hazard not normally attracting any hazard warning.

**InSpec® HA** - Hypochlorous Acid  
**Role: Disinfectant/sporicide**  
**Mode of action: oxidation of cellular components**

Hypochlorous acid is a very powerful oxidant; hence is a very potent sporicide at low concentrations. Hypochlorous acid reacts with proteins of many types denaturing and deactivating the protein's functionality. Cellular components such as ribosomes, DNA, RNA, enzymes and structural proteins are all affected and destroyed. The oxidation mechanism of Hypochlorous acid consists of electron transfer.

## InSpec® Biocides Efficacy

Establishing the efficacy of a biocide is critical to selection of the correct programme of use within any cleanroom facility.

Qualification of the efficacy of the InSpec® range is achieved via European Standards - CEN TC 216 phase 1 & phase 2 (suspension tests and surface tests). Testing was performed by accredited 3rd party laboratories.



### Summary of InSpec Biocide Qualification

Efficacy						
Requirement of EN Standard & Performance of InSpec Product	EN 1276: Bacterial Suspension test	EN 1650: Fungal Suspension test	EN 13697: Bacterial Surface test	EN 13697: Fungal Surface test	EN 13704: Sporocidal Suspension Test	EN 14476: Virucidal Suspension Test
<b>Organisms referenced by standard</b>	P. aeruginosa	C. albicans	P. aeruginosa	C. albicans	B. subtilis	Poliovirus-1,
	S. aureus	A. brasiliensis	S. aureus	A. brasiliensis		Adenovirus-5
	E. hirae		E. hirae			Murine norovirus
	E. coli		E. coli			
<b>Temperature</b>	20°C					
<b>Clean conditions</b>	0.3 g/l bovine albumin					
<b>EN Contact time Required</b>	5 mins	15 mins	5 mins	15 mins	60 mins	5 mins
<b>EN Log Reduction Required</b>	5 Log	4 Log	4 Log	3 Log	3 Log	4 Log
<b>Achieved by InSpec QT</b>	Pass	Pass	Pass	Pass	N/A	N/A
<b>Achieved by InSpec QT+</b>	Pass	Pass	Pass	Pass	N/A	N/A
<b>Achieved by InSpec AN</b>	Pass	Pass	Pass	Pass	N/A	N/A
<b>Achieved by InSpec IPA</b>	Pass	Pass	Pass	Pass	N/A	N/A
<b>Achieved by InSpec DE</b>	Pass	Pass	Pass	Pass	N/A	N/A
<b>Achieved by InSpec HPX</b>	Pass	Pass	Pass	Pass	Pass	N/A
<b>Achieved by InSpec OX</b>	Pass	Pass	Pass	Pass	Pass	N/A
<b>Achieved by InSpec HA</b>	Pass	Pass	Pass	Pass	Pass at 1 min	Poliovirus-1, > 4 log (Pass)
						Adenovirus-5, 2.85 Log
						Murine norovirus, 1 Log

United States Pharmacopoeia (USP) General Chapter 1072 "Disinfectants and Antiseptics"1.3.  
This chapter stipulates that a 3 log reduction in the viable microbial count should be demonstrated for bacteria.

## InSpec® Biocides Rotation

There are no hard and fast rules that define how frequently products are rotated **OR** how many disinfectants are rotated. Rotational controls should be considered and results demonstrated.

It is up to the end user to decide upon a rotational programme and undertake validation of this and validate their own process.

### A Rotational Programme should be based upon:

- Historic Environmental Monitoring (EM) data
- The periodic use of sporicides
- The results of efficacy studies
- On-going trended micro data

### Noting:

- Alcohols are not normally included in the rotational programme, but can be used for periodic rinses to remove residues.
- Two or three disinfectants to be rotated - most use two - different modes of action to be taken into account.

Rotation can be used to combat other issues

- **Corrosion**
- **H&S issues**
- **Cost**
- **Residue**

### Rotational Schemes

QT & AN

QT & HA

QT & OX

QT & HPX

QT+ & AN

QT+ & HA


QT+ & OX

QT+ & HPX

AN & HA

AN & OX

AN & HPX

 High level disinfectant paired with another high level disinfectant

 High level disinfectant paired with sporicide

## InSpec® Biocides Cleaning Ability

The cleaning ability of a biocide formulation can reduce cleaning times significantly dependent upon the soiling type and amount of soil to be dealt with.

Building this ability into the formulation is therefore important. Some biocides such as alcohols have no surfactant present and cleaning is dominated by a single mechanism – solubility.

The fact that alcohols have a lower surface tension also assists in removing soils.

Those InSpec® products with surfactants present have additional cleaning mechanisms:

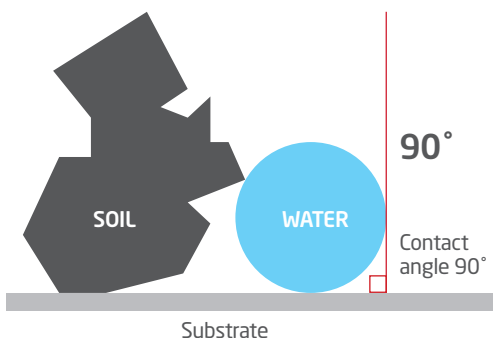
- **Wetting**  
Low surface tension allowing penetration behind soils and into cracks
- **Emulsification**  
Forming an emulsion of hydrophobic materials such as grease/oil into solution
- **Hydrolysis**  
Breaking down insoluble molecules rendering them more soluble
- **Solubility**  
The Polarity of solvent molecules and soil compounds can either be polar or nonpolar. As a generality 'like dissolves like' i.e. polar soil dissolves in polar solvent; nonpolar soil dissolves in nonpolar solvent.

### Summary of the Mechanisms at work in the InSpec Range

Efficacy				
InSpec Product	Surfactant Present	Type	Dominant Cleaning Mechanism(s)	Cleaning Ability
InSpec IPA	No	N/A	Solubility	Medium
InSpec DE	No	N/A	Solubility	Medium
InSpec QT	Yes	Cationic Surfactant	Wetting + Emulsification + Solubility	High
InSpec QT+	Yes	Cationic Surfactant	Wetting + Emulsification + Solubility	High
InSpec AN	Yes	Anionic Surfactant	Wetting + Emulsification + Solubility	High
InSpec HPX	Yes	Non-ionic	Wetting + Emulsification + Solubility	Medium
InSpec OX	No	N/A	Solubility	Medium
InSpec HA	No	N/A	Solubility	Medium
InSpec N7	Yes	Non-ionic	Wetting + Emulsification + Solubility	High
InSpec N10	Yes	Non-ionic	Wetting + Emulsification + Hydrolysis + Solubility	Very High

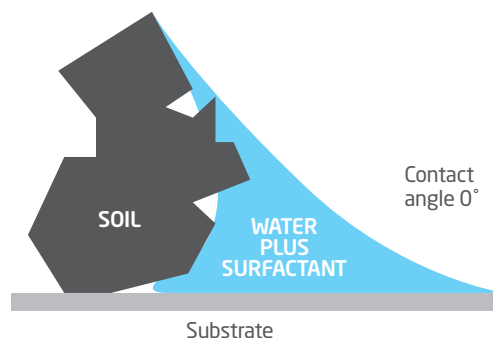
#### No Surfactant Present

- Surface tension is high
- Reduced probability of soil removal



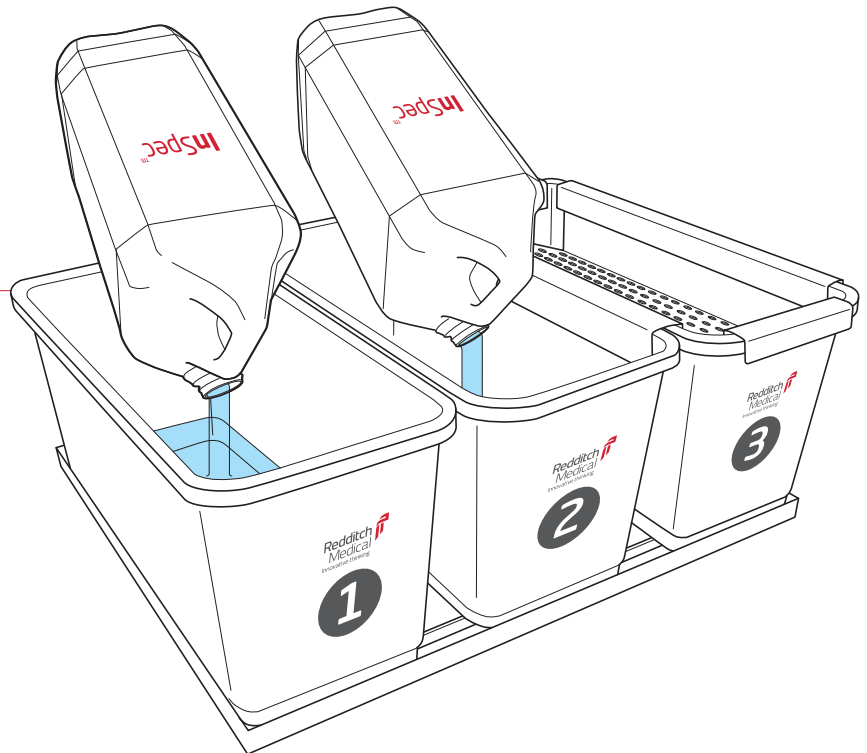
#### Surfactant Present

- Surface tension is reduced
- Enhanced probability of soil removal

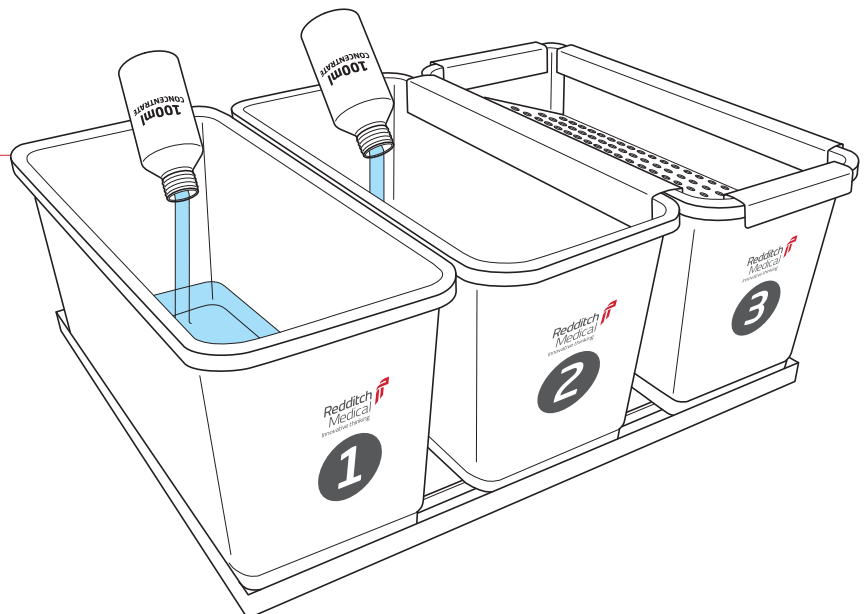


**InSpec® Biocides****Preparation of Mops - 3 Bucket System****1 Ready-to-Use Products**

If using **InSpec®** ready-to-use products (RTU) which are pre-diluted, add the biocide/detergent to buckets 1 and 2 and proceed to Step 4.

**2 Concentrate Products**

If using **InSpec®** concentrates - first add concentrated biocide / detergent to buckets 1 and 2.

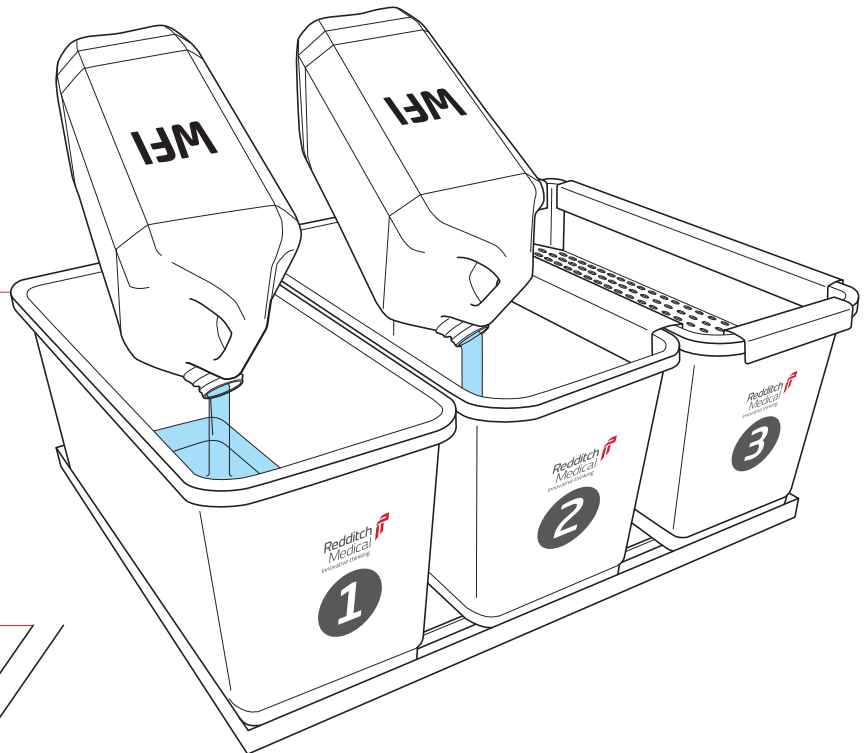




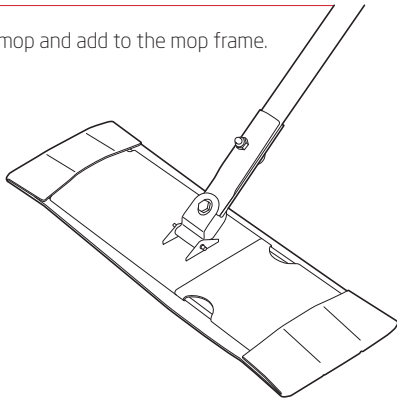
**InSpec® Biocides**

## Preparation of Mops - 3 Bucket System

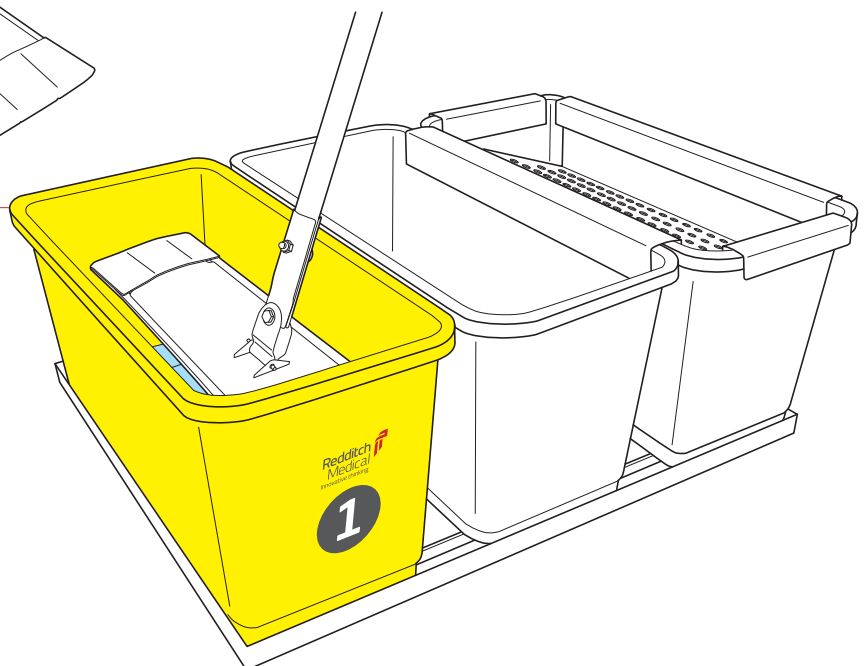
- 3 Concentrate Products**  
Then dilute the concentrate in accordance with the instructions and ensure solution is adequately mixed.



- 4** Prepare a dry mop and add to the mop frame.



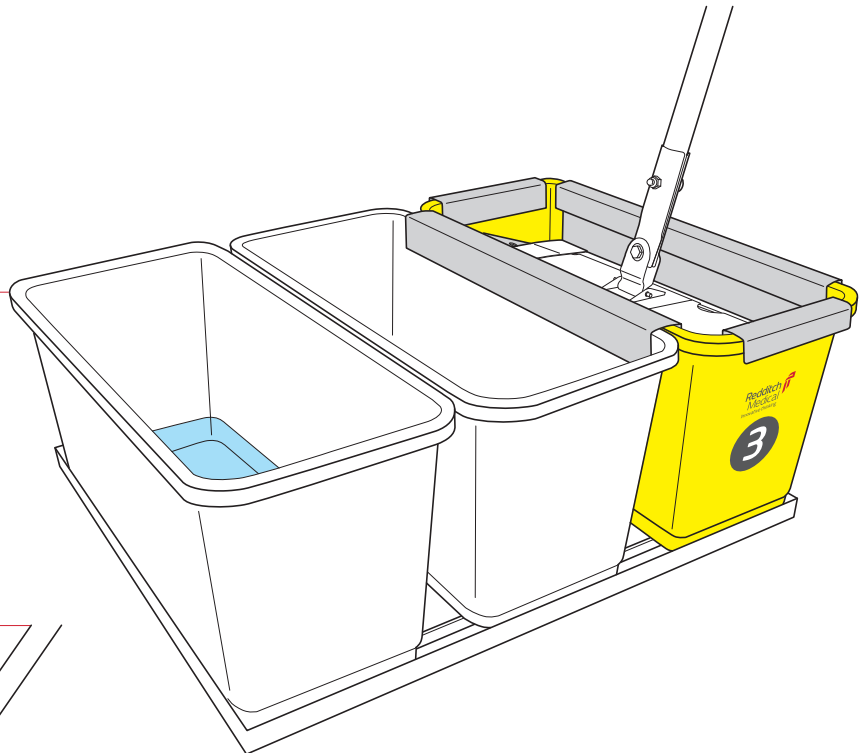
- 5** Place the dry mop into **Bucket 1**.



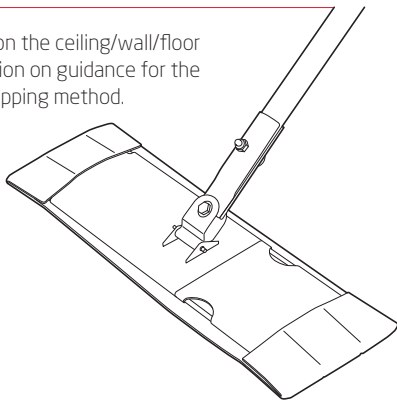
InSpec® Biocides

## Preparation of Mops - 3 Bucket System

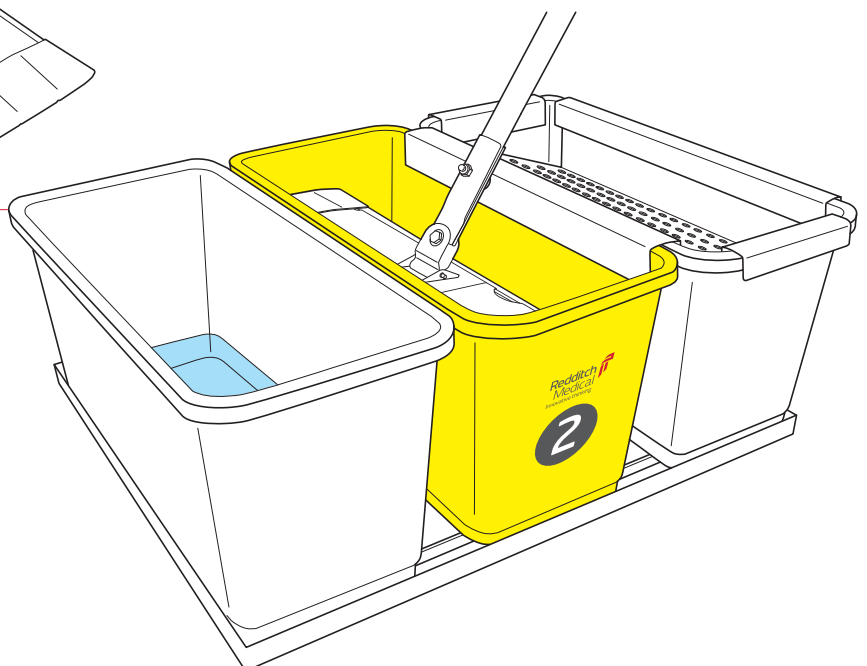
- 6** Remove excess solution via wringer over **Bucket 3** (mop should be saturated but not dripping).



- 7** Use the mop on the ceiling/wall/floor - see the section on guidance for the cleanroom mopping method.



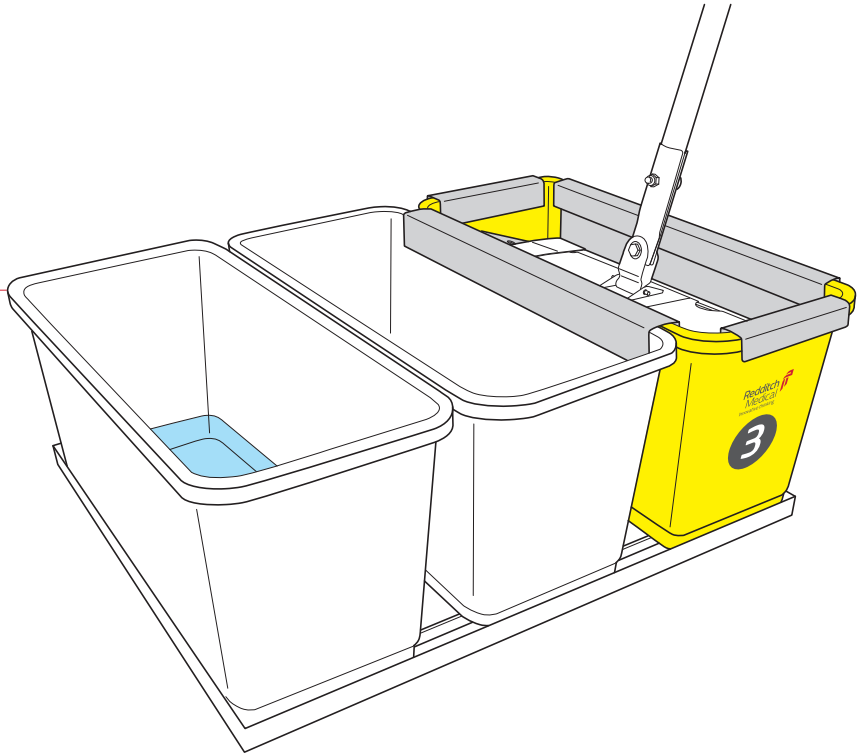
- 8** Return the 'exhausted' mop and place this into **Bucket 2**.



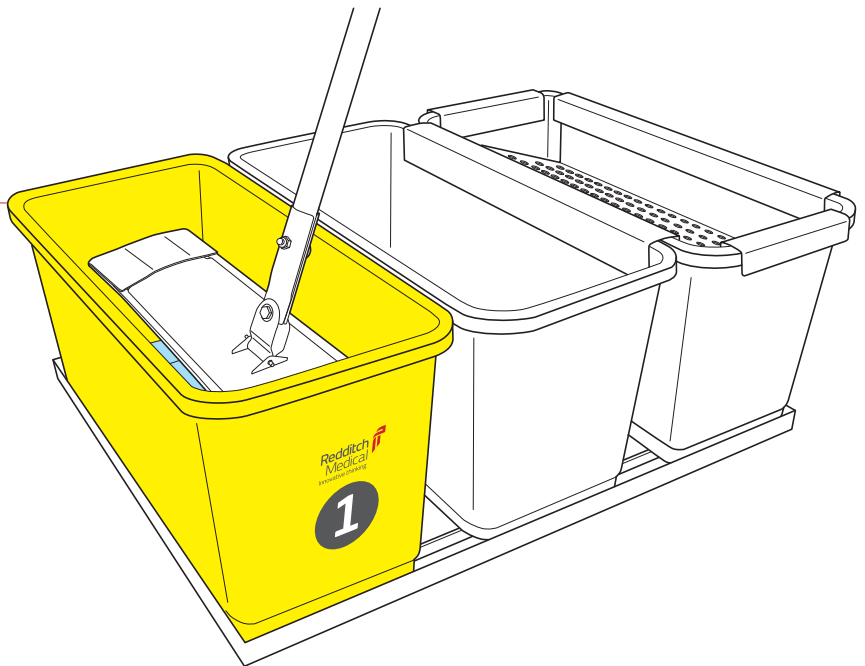
InSpec® Biocides

## Preparation of Mops - 3 Bucket System

- 9 Wring this mop well to remove soiled biocide/detergent and particulate matter in **Bucket 3**.



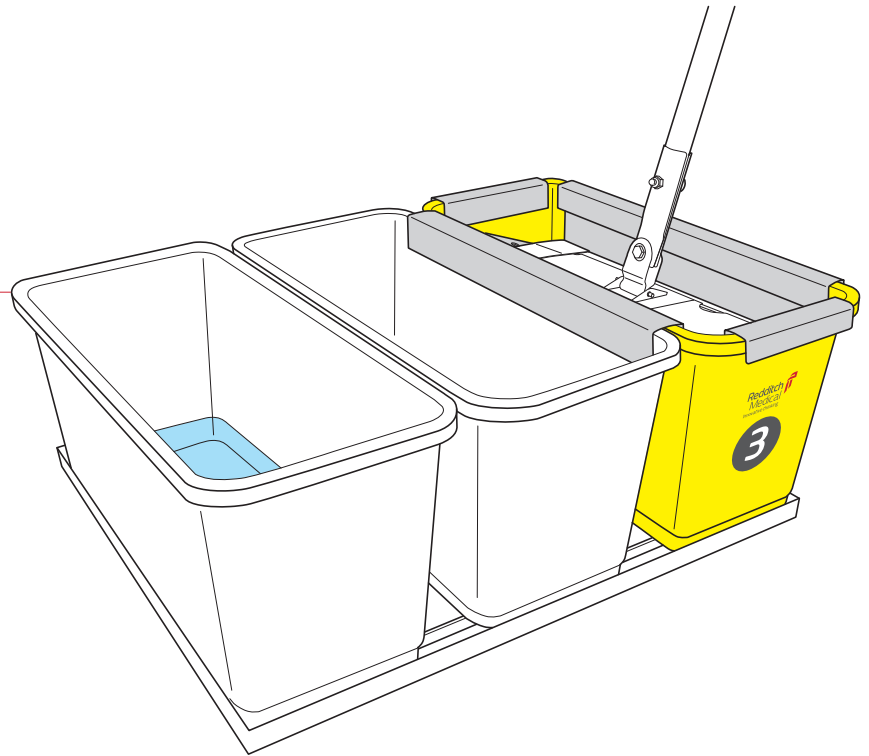
- 10 Next place this mop into **Bucket 1**.



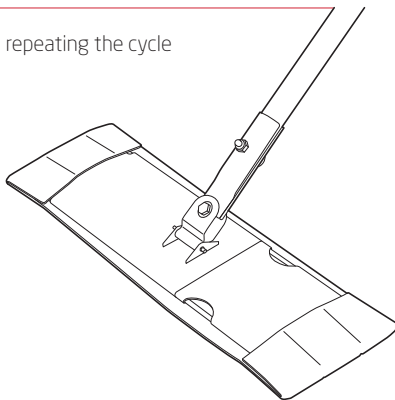
InSpec® Biocides

## Preparation of Mops - 3 Bucket System

- 11** Wring this mop well to remove soiled biocide/detergent and particulate matter in **Bucket 3**.



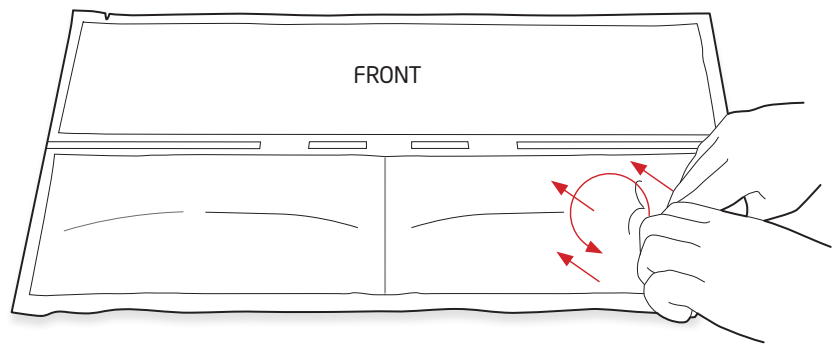
- 12** Use the mop - repeating the cycle (steps 7-11).



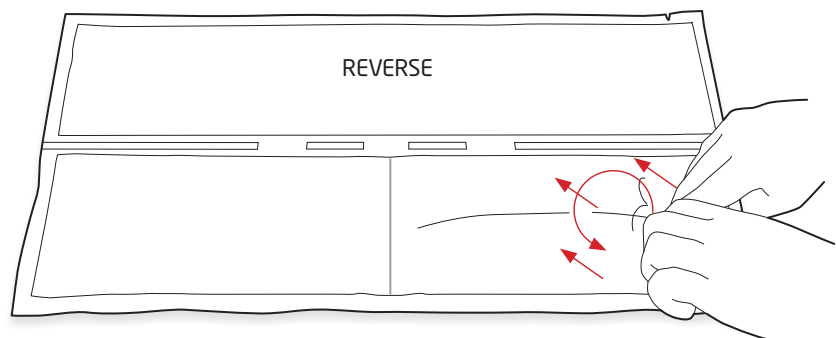
**InSpec® Biocides**

## Preparation of Mops - Burstable System

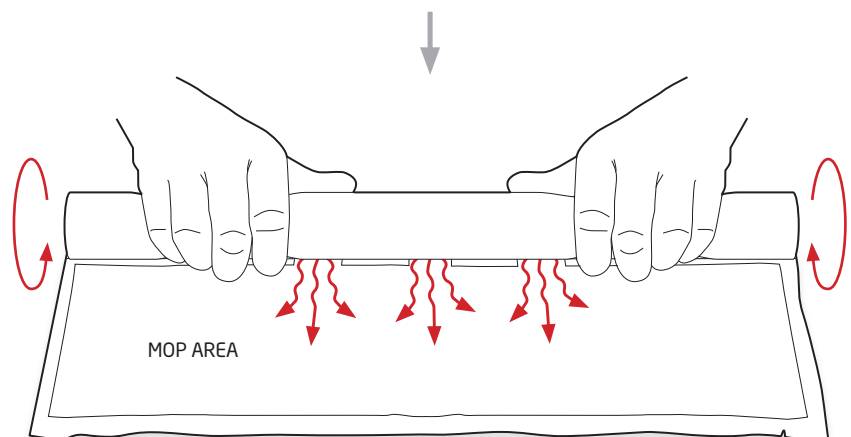
- 1** Place pouch on flat surface and roll the right hand liquid chamber then whilst holding it tight with one hand press down with the other hand to burst inner pouch #1. Squeeze out contents.



- 2** Turn over pouch - so the reverse side faces you and then roll the remaining right hand liquid chamber then whilst holding it tight with one hand press down with the other hand to burst inner pouch #2. Squeeze out contents.



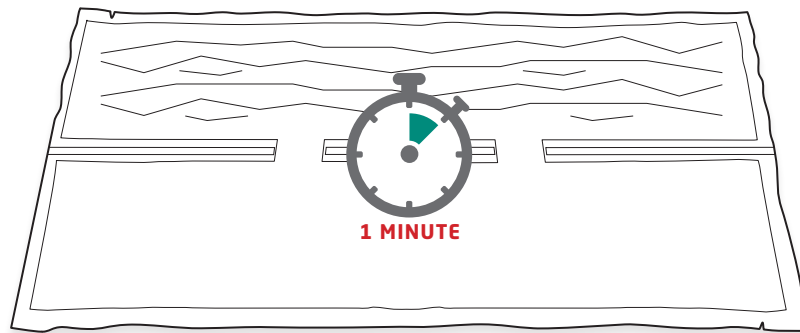
- 3** To ensure maximum flow of the biocide through to the mop side, roll and compress the liquid side of the pouch to force all liquid into the mop chamber.



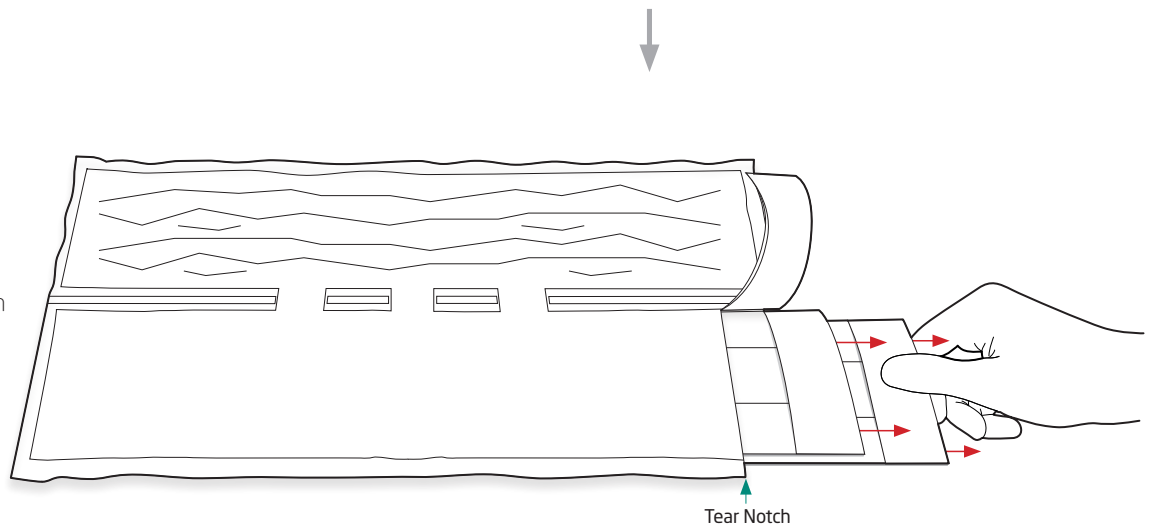
**InSpec® Biocides**

## Preparation of Mops - Burstable System

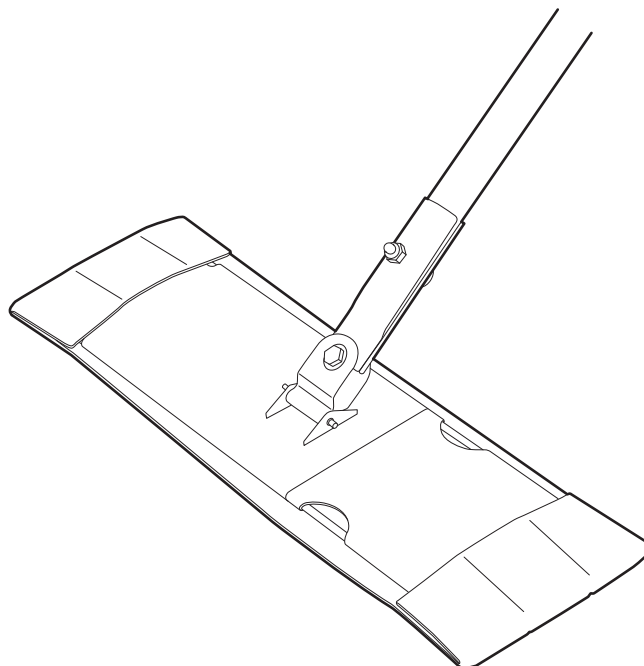
- 4** Leave flat for a further minute for the biocide to fully wet the mops.



- 5** Open using tear notch to release both mops and use within 2 hours maximum.

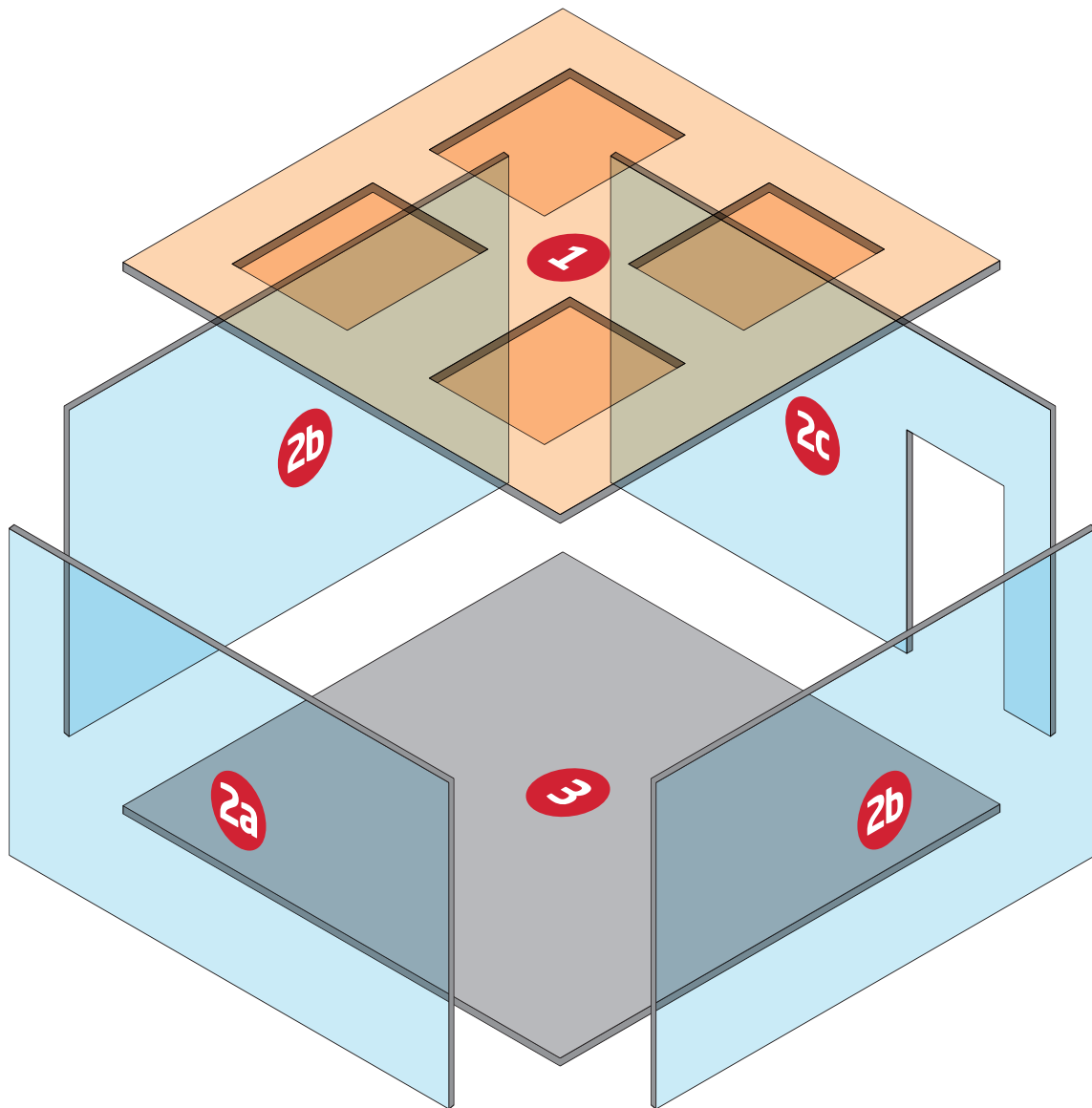


- 6** Attach the mop to the head and it is ready for use.



InSpec® Biocides

# How to Mop a GMP Cleanroom



## CLEANING ISO 5 AND ISO 6 CLEANROOMS

The sequence to follow when cleaning is:

- 1 HEPA Filtered Ceiling
- 2 Walls in the sequence 2a 2b 2c
- 3 Floor

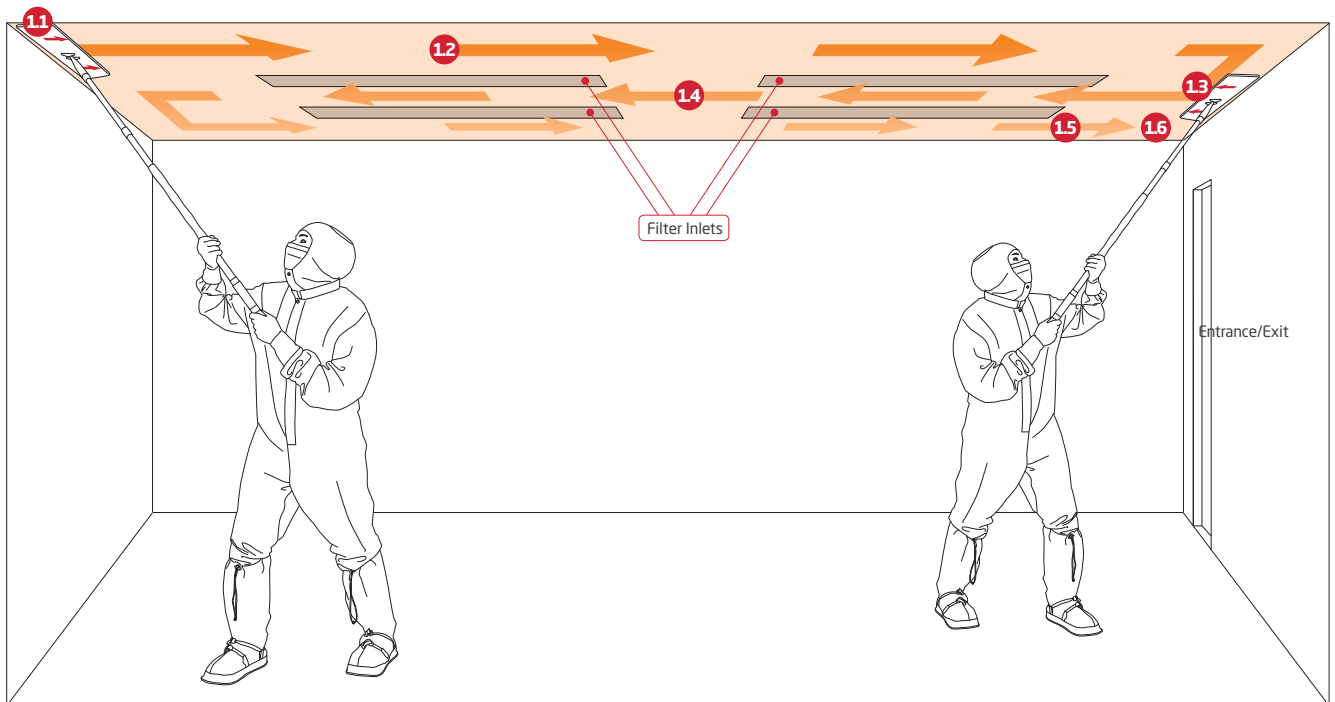
**InSpec® Biocides**

# Mopping Technique - Ceilings

## 1 HEPA FILTERED CEILING

The sequence to follow when cleaning the ceiling is:

- 1.1 Start with the impregnated mop in the top corner, typically furthest from the entrance/exit
- 1.2 Wipe the mop straight across the surface
- 1.3 At the end, transition the mop to maintain the same leading edge
- 1.4 Wipe the mop across the surface with a 10% overlap of the previous pass
- 1.5 Continue until the entire surface has been cleaned/disinfected up to 20m<sup>2</sup> per mop.
- 1.6 Discard mop(s)





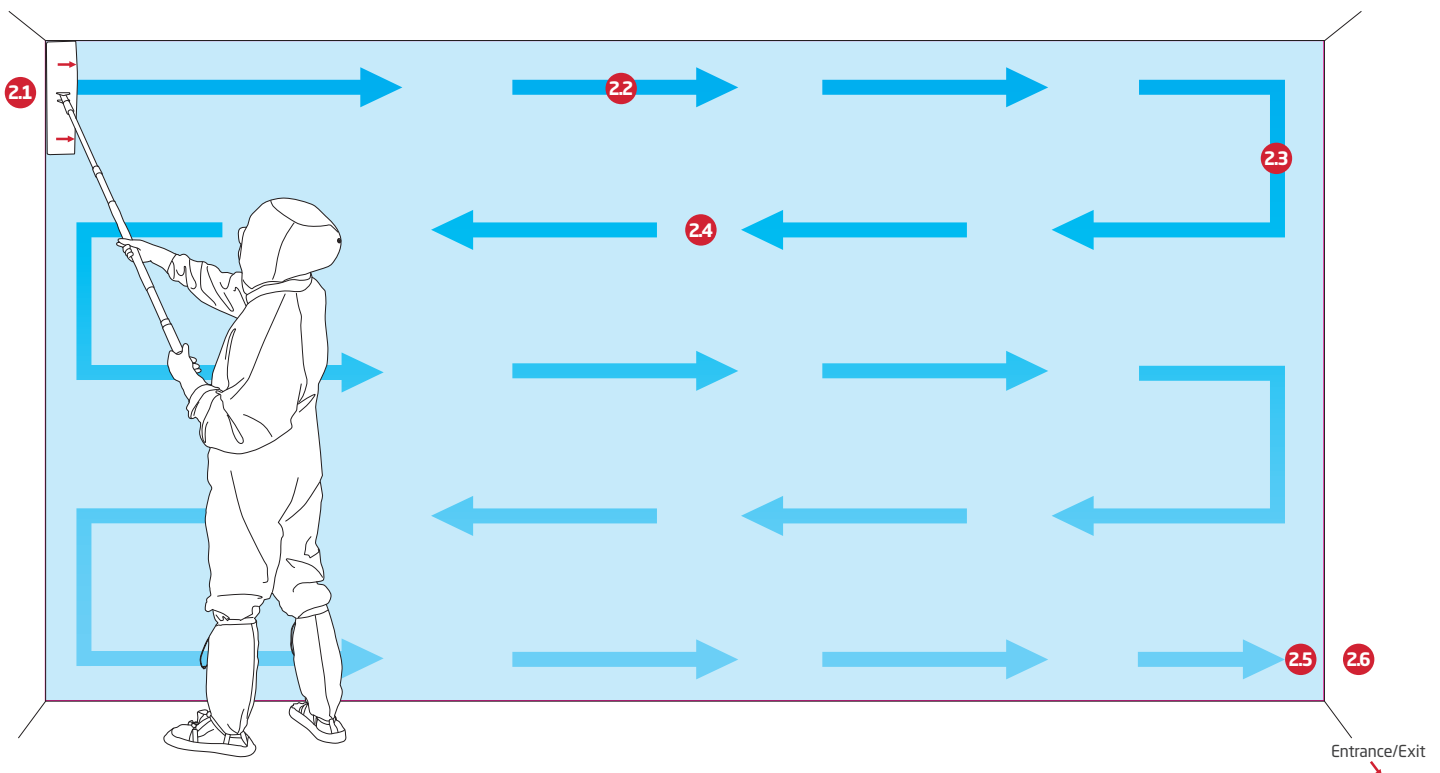
**InSpec® Biocides**

# Mopping Technique - Walls

## 2 WALLS

The sequence to follow when cleaning walls is:

- 2.1 Start with the impregnated mop in the top corner of the cleanest wall, typically furthest from the entrance/exit
- 2.2 Wipe the mop straight across the wall surface
- 2.3 At the end, transition the mop to maintain the same leading edge
- 2.4 Wipe the mop across the tent wall surface with a 10% overlap of the previous pass
- 2.5 Continue until the entire wall surface has been cleaned/disinfected up to 20m<sup>2</sup> per mop.
- 2.6 Discard mop(s)



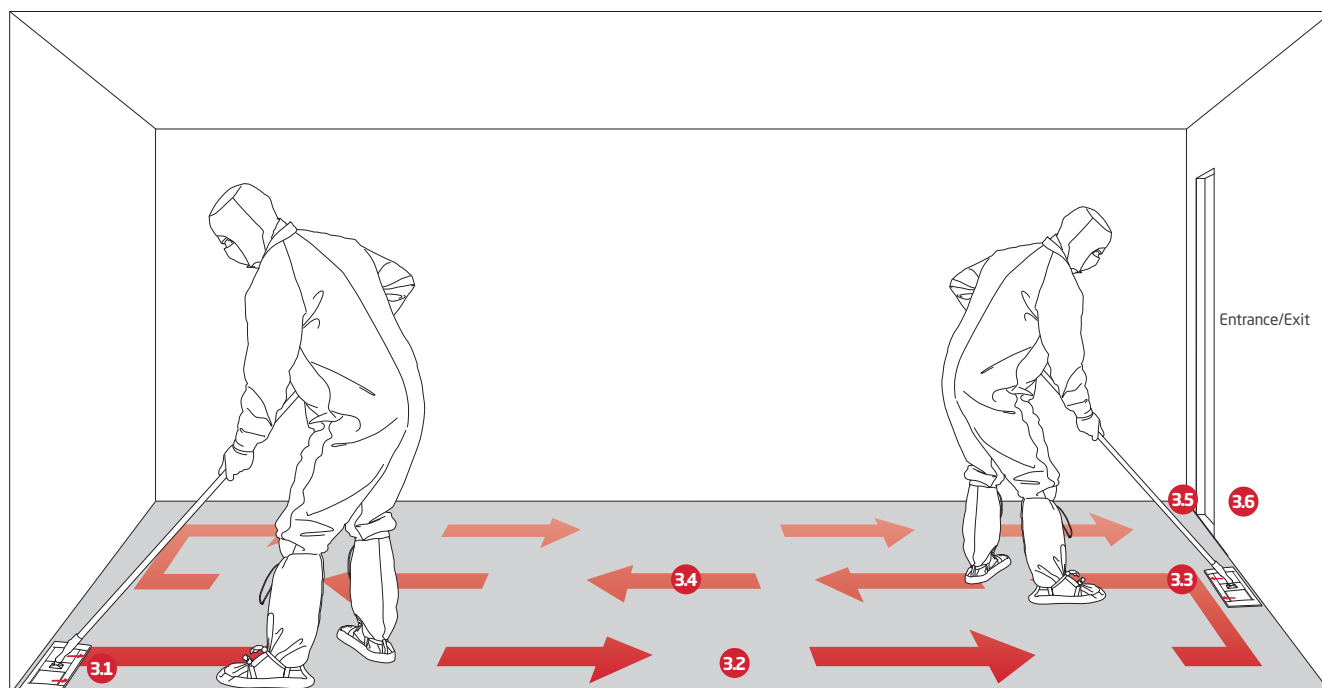
**InSpec® Biocides**

## Mopping Technique - Floors

### 3 FLOORS

The sequence to follow when cleaning floors is:

- 3.1 Start with the impregnated mop in the corner, typically furthest from the entrance/exit
- 3.2 Wipe the mop straight across the floor surface
- 3.3 At the end, transition the mop to maintain the same leading edge
- 3.4 Wipe the mop across the floor surface with a 10% overlap of the previous pass
- 3.5 Continue working towards the most soiled area, typically the exit/entrance, until the entire floor surface has been cleaned/disinfected up to 20m<sup>2</sup> per mop.
- 3.6 Discard mop(s)



**InSpec® Biocides****Product Formats Associated with Mopping****InSpec Range**

5L Products Part Numbers

InSpec® Sterile 5L Products		
5L Product	Sterile 5L Part No.	No. per case
InSpec QT	QTWFI30-5LS	2
InSpec QT+	QTPLWFI31-5LS	2
InSpec AN	ANWFI20-5LS	2
InSpec IPA	IPAWFI1-5LS	2
InSpec DE	DEWFI10-5LS	2
InSpec HPX	HPXWFI160-5LS	2
InSpec OX	OXPW40-5LS	2
InSpec HA	HAPW50-5LS	2
InSpec N7	N7WFI1-5LS	2
InSpec N10	N10WFI1-5LS	2

InSpec® Non-Sterile 5L Products	
Non-Sterile 5L Part No	No. per case
NSQTWFI-5L	2
NSQTPLWFI-5L	2
NSANWFI-5L	2
NSIPAWFI-5L	2
NSDEWFI-5L	2
N/A	N/A
NSOXPW-5L	2
NSHAPW-5L	2
NSN7WFI-5L	2
NSN10WFI-5L	2

If a product option is designated as N/A this means Redditch Medical does not manufacture or stock this combination. However, if this is a product you require, please contact us to explore technical and commercial feasibility.

**InSpec Range**

Concentrate Products Part Numbers

InSpec® Sterile Concentrate Products		
Concentrate Product	100ml/102ml Sterile Part No.	No. per case
InSpec QT	QTCNC30-100	50
InSpec QT+	QTPLCNC-102	50
InSpec AN	ANCNC20-100	50
InSpec IPA	N/A	N/A
InSpec DE	N/A	N/A
InSpec HPX	N/A	N/A
InSpec OX	N/A	N/A
InSpec HA	N/A	N/A
InSpec N7	N7WFI1-100MLS	50
InSpec N10	N10WFI1-100MLS	50

InSpec® Non-Sterile Concentrate Products	
100ml/102ml Non-Sterile Part No.	No. per case
NSQTCONC-100ML	50
NSQTPLCONC-102	50
NSANCONC-100ML	50
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
NSN7CONC-100ML	50
NSN10CONC-100ML	50

If a product option is designated as N/A this means Redditch Medical does not manufacture or stock this combination. However, if this is a product you require, please contact us to explore technical and commercial feasibility.

**InSpec Range**

InSpec/Hydroflex Burstable Mops Part Numbers

InSpec®/Hydroflex Sterile Burstable Mops						
InSpec Product	Burstable Mops 2 x EF40	No. per case	Burstable Mops 2 x EBF40	No. per case	Burstable Isolator Mops 2 x EC20	No. per case
InSpec QT	2116008	5	N/A	N/A	N/A	N/A
InSpec AN	2116006	5	N/A	N/A	N/A	N/A
InSpec HPX	2116010	5	N/A	N/A	2116015	5
InSpec OX	2116004	5	N/A	N/A	2116014	5
InSpec HA	2116002	5	N/A	N/A	2116013	5
InSpec N10	N/A	N/A	2116012	5	N/A	N/A

InSpec®/Hydroflex Non-Sterile Burstable Mops			
Burstable Mops 2 x EF40	No. per case	Burstable Mops 2 x EBF40	No. per case
2116007	5	N/A	N/A
2116005	5	N/A	N/A
2116009	5	N/A	N/A
2116003	5	N/A	N/A
2116001	5	N/A	N/A
N/A	N/A	2116011	5

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InSpec® Biocides

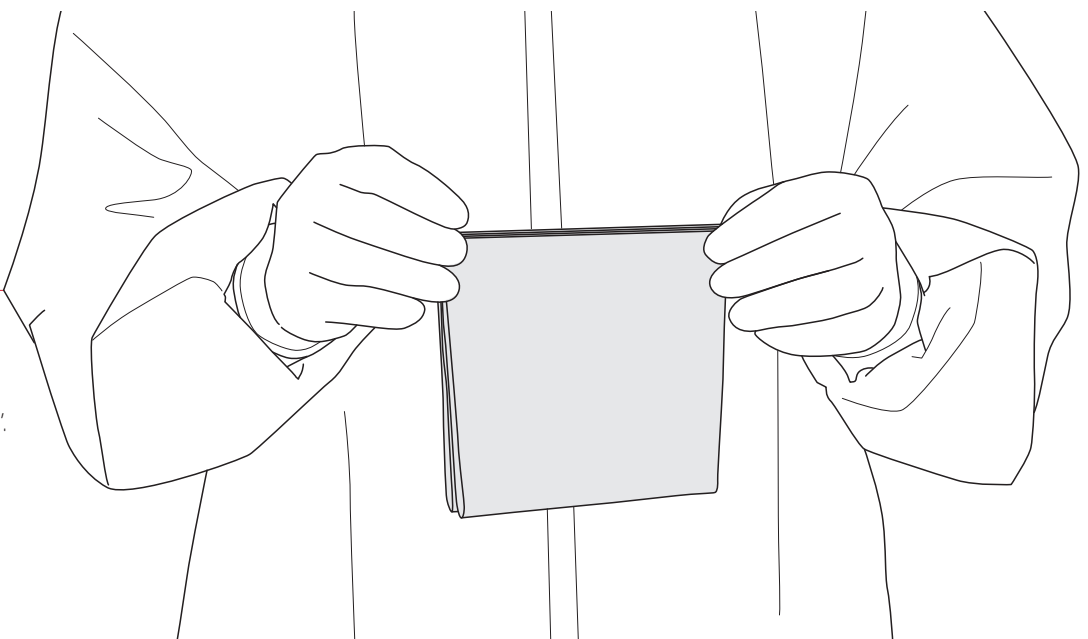
## How to Wipe Surfaces in a GMP Environment

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1 Fold the wipe in half.



2 Then fold the wipe in half again to create a 4-layer wipe 'pad'.

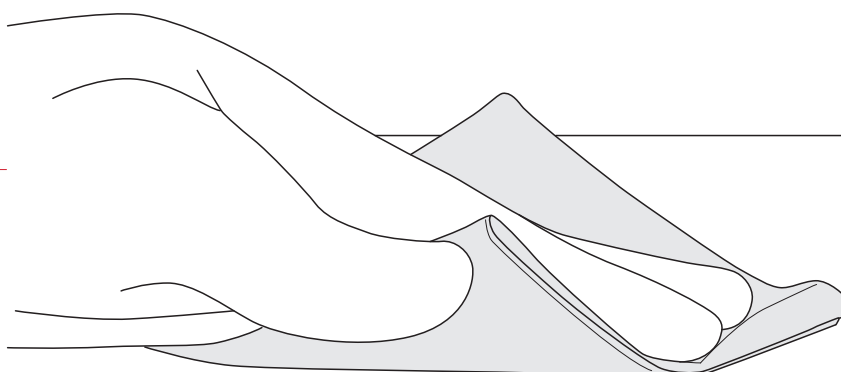


**InSpec® Biocides****How to Wipe Surfaces in a GMP Environment**

- 3** Spray the wipe with **InSpec®** biocide or detergent to fully wet the whole wipe 'pad'.



- 4** Wipe the cleanroom surface using the folded edge of the wipe 'pad' as the leading edge. Use 10% overlapping passes to ensure full coverage.



**InSpec® Biocides**

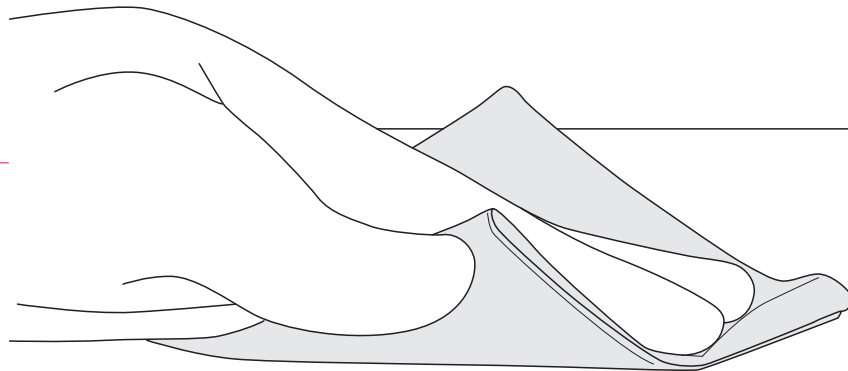
## How to Wipe Surfaces in a GMP Environment

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- 5** Unfold and re-fold the wipe 'pad' to present a new clean surface face. This can be up to 8 surface faces, dependent on surface area covered and soiling level and amount of biocide/detergent.



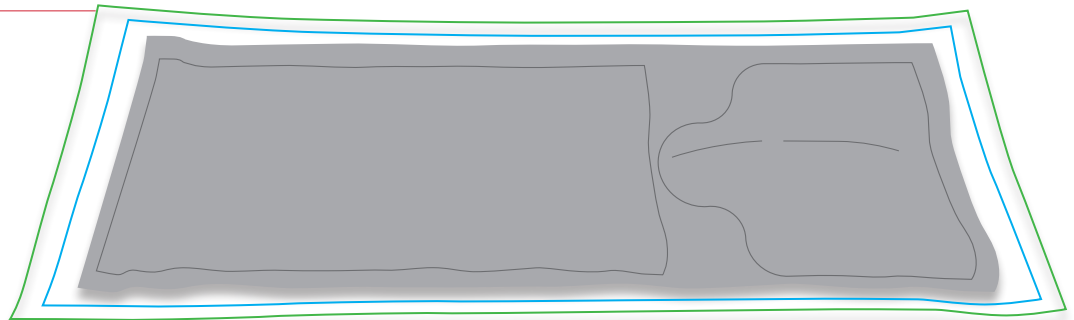
- 6** Continue to wipe the cleanroom surface using the folded edge of the wipe 'pad' as the leading edge. Use 10% overlapping passes to ensure full coverage.



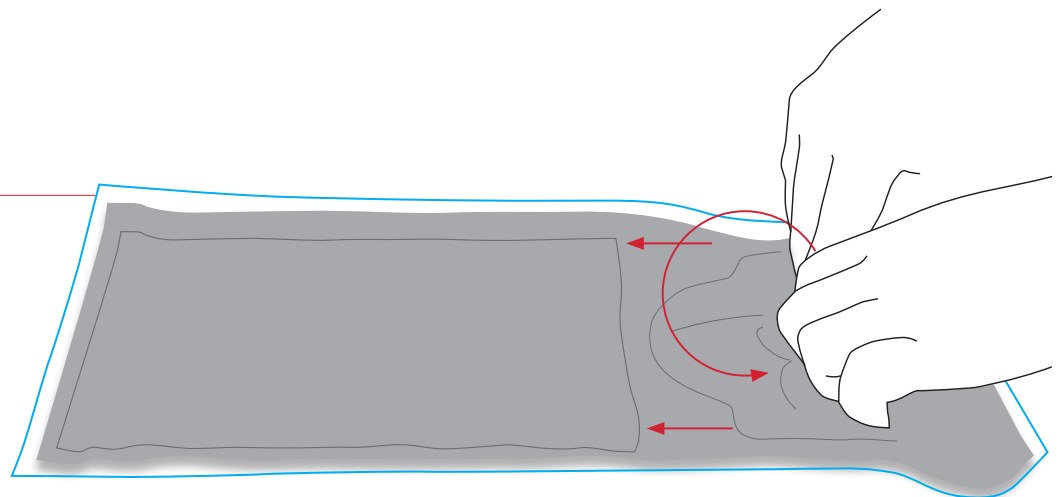
**InSpec® Biocides**

## Use of Wipes - Burstable System

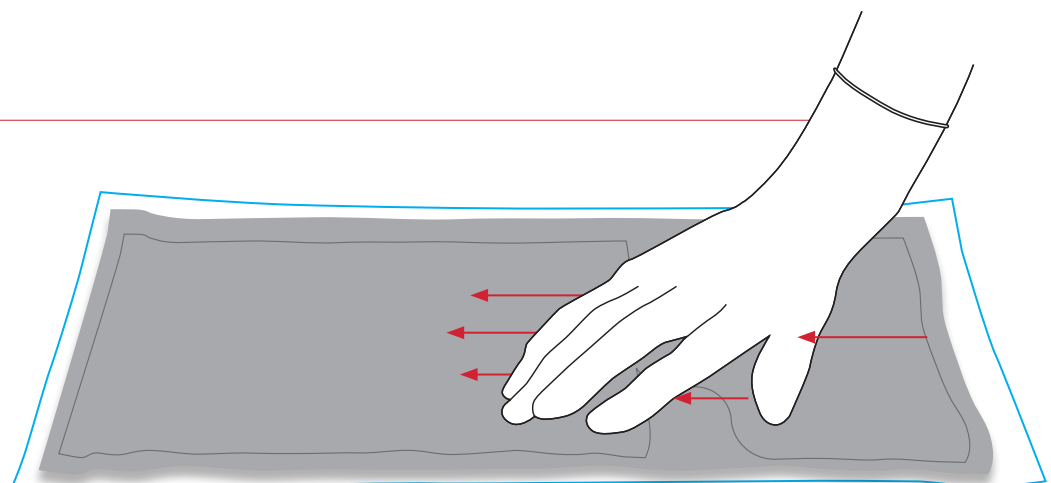
- 1** Ensure the pouch is free from defects and is placed on a hard flat surface. Remove all but one outer bag. NB – sterile products start with two outer bags, non-sterile versions only have a single outer bag.



- 2** With a single outer bag remaining, roll the pouch from the liquid end and apply pressure to force the liquid across the frangible barrier to wet the wipes/mop.

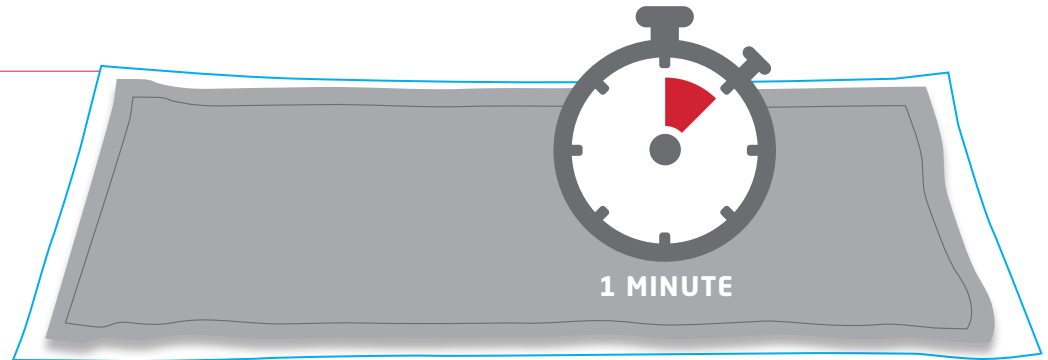


- 3** Ensure liquid is fully transferred to the wipe/mop section.

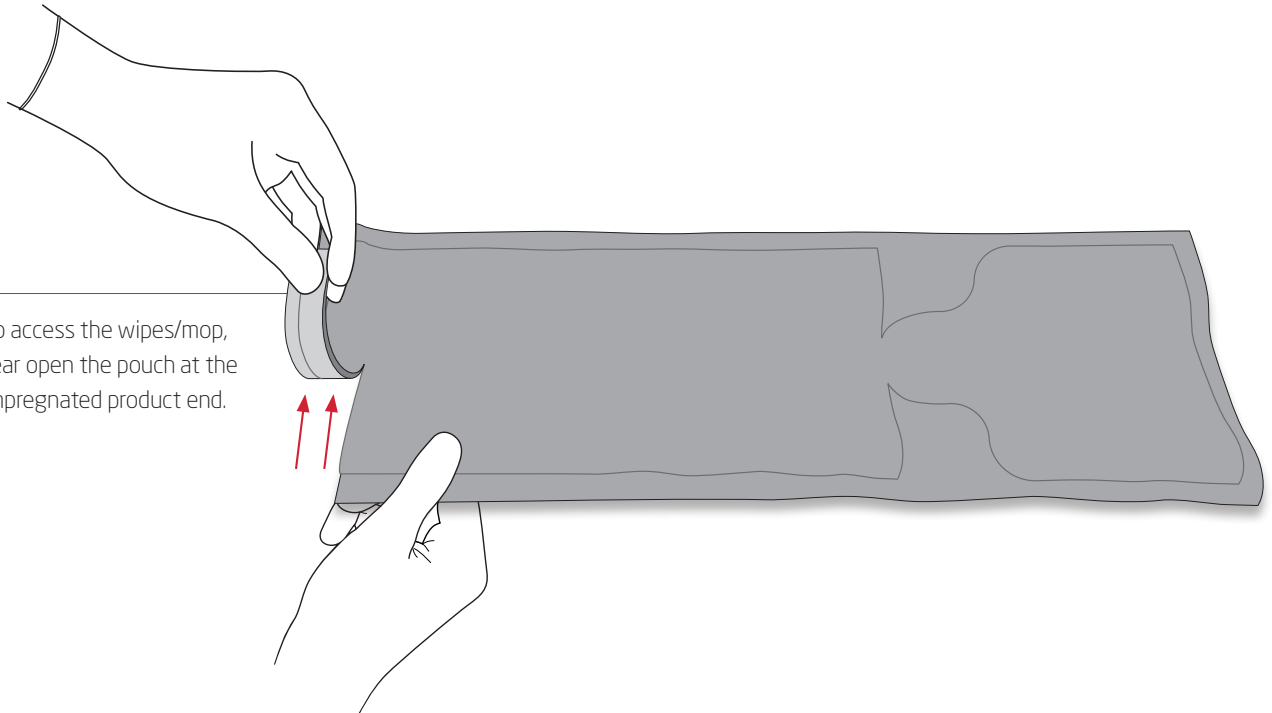


**InSpec® Biocides****Use of Wipes - Burstable System**

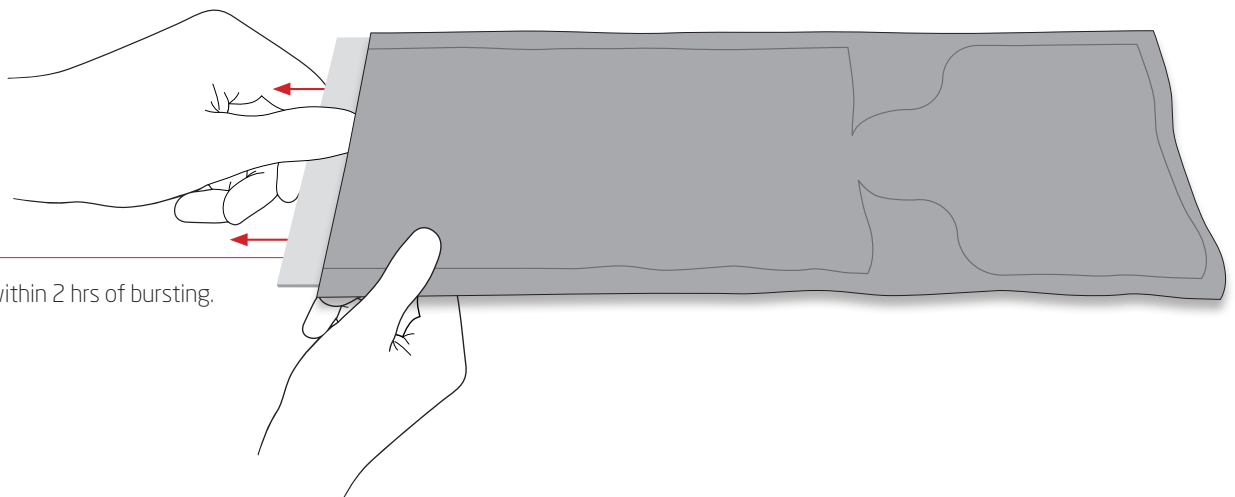
- 4** Wait for 1 minute, then remove the clear outer bag ensuring there is no damage or leak present.



- 5** To access the wipes/mop, tear open the pouch at the impregnated product end.



- 6** Use within 2 hrs of bursting.





**InSpec® Biocides****Product Formats Associated with Spraying & Wiping****InSpec Range**

Trigger Spray Part Numbers

InSpec® Sterile Trigger Spray Products							InSpec® Non-Sterile Trigger Spray Products					
Trigger Spray Product	Sterile 900ml Part No.	No. per case	Sterile 1 Litre Part No.	No. per case	Sterile 500ml Part No.	No. per case	Non-sterile 900ml Part No.	No. per case	Non-sterile 1 Litre Part No.	No. per case	Non-sterile 500ml Part No.	No. per case
InSpec QT	QTWFI30-1LS	6	N/A	N/A	N/A	N/A	NSQTWFI-1L	6	N/A	N/A	N/A	N/A
InSpec QT+	QTPLWFI31-900MLS	6	N/A	N/A	N/A	N/A	NSQTPLWFI-1L	6	N/A	N/A	N/A	N/A
InSpec AN	ANWFI20-1LS	6	N/A	N/A	N/A	N/A	NSANWFI-1L	6	N/A	N/A	N/A	N/A
InSpec IPA	N/A	N/A	IPAWFI1-1LS	6	IPAWFI-500MLS	8	N/A	N/A	NSIPAWFI-1L	6	NSIPAWFI-500ML	8
InSpec DE	N/A	N/A	DEWFI10-1LS	6	DEWFI11-500MLS	8	N/A	N/A	NSDEWFI-1L	6	NSDEWFI11-500ML	8
InSpec HPX	N/A	N/A	HPXWFI60-1LS	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec OX	N/A	N/A	OXPW40-1LS	6	N/A	N/A	N/A	N/A	NSIOXPW-1L	6	N/A	N/A
InSpec HA	N/A	N/A	HAPW50-1LS	6	N/A	N/A	N/A	N/A	NSHAPW-1L	6	N/A	N/A
InSpec N7	N/A	N/A	N7WFICC-1LS	6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec N10	N/A	N/A	N10WFI1CC-1LS	6	N/A	N/A	N/A	N/A	NSN10WFI-1L	6	N/A	N/A

**InSpec Range**

Sterile Dry Wipes Part Numbers

InSpec® Sterile Dry Wipe Products				
Product	Sterile Part No.	No. per case	Wipe Media Type	Individual Wipe Size (mm)
Dry Wipes 9" - 10 wipes/pack, 10 packs per bag	DW9X9S	10 (1,000 wipes in total)	Polycellulose 68 gsm	230 x 230
Dry Wipes 12" - 10 wipes/pack, 10 packs per bag	DW12X12S	10 (1,000 wipes in total)	Polycellulose 68 gsm	300 x 300
Dry Wipes 18" - 100 wipes per pack	DW18X18S	3 (300 wipes in total)	Polycellulose 68 gsm	450 x 450

**InSpec Range**

Sterile Burstable Wipes Part Numbers

InSpec® Sterile Burstable Wipes		
Wipe Products	Burstable 15 Wipes	No. per case
InSpec QT	QTWFI30BP15S	20
InSpec QT+	QTPLWFI31BP15S	20
InSpec AN	ANWFI20BP15S	20
InSpec OX	OXPW40BP15S	20
InSpec HA	HAPW50BP15S	20



If a product option is designated as N/A this means Redditch Medical does not manufacture or stock this combination. However, if this is a product you require, please contact us to explore technical and commercial feasibility.

## InSpec® Biocides

## Product Formats Associated with Spraying &amp; Wiping

## InSpec Range

Sterile Wipes Part Numbers

InSpec® Sterile Polycellulose Wipe Products										
Wipe Products	Individual Sachet Wipes	No. per case	Sterile Peel Back 15 Wipes	No. per case	Sterile Peel Back 50 Wipes	No. per case	Sterile Tub Wipe 200 per Roll	No. per case	Sterile Premium Tub Wipe 130 per Roll	No. per case
InSpec QT	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec QT+	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec AN	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec IPA	IPAWFIPCH-1S	500	IPAWFIPCH15S	25	IPAWFIPCH50S	16	IPAWF112TB200S	12	IPAWF112TB130S	12
InSpec DE	N/A	N/A	DEWFIPCH15S	25	DEWFIPCH50S	16	DEWF112TB200S	12	DEWF112TB130S	12
InSpec HPX	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec OX	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec HA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
InSpec N7	N/A	N/A	N7WFIPCH15S	25	N7WFIPCH50S	16	N/A	N/A	N/A	N/A
InSpec N10	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

InSpec® Non-Sterile Polycellulose Wipe Products						
Wipe Products	Non-Sterile Peel Back 15 Wipes	No. per case	Non-Sterile Peel Back 50 Wipes	No. per case	Non-Sterile Tub Wipe 200 per Roll	No. per case
InSpec QT	N/A	N/A	N/A	N/A	N/A	N/A
InSpec QT+	N/A	N/A	N/A	N/A	N/A	N/A
InSpec AN	N/A	N/A	N/A	N/A	N/A	N/A
InSpec IPA	NSIPAWFIPCH15	25	NSIPAWFIPCH50	16	NSIPAWF112TB200	12
InSpec DE	NSDEWFIPCH15	25	NSDEWFIPCH50	16	NSDEWF112TB200	12
InSpec HPX	N/A	N/A	N/A	N/A	N/A	N/A
InSpec OX	N/A	N/A	N/A	N/A	N/A	N/A
InSpec HA	N/A	N/A	N/A	N/A	N/A	N/A
InSpec N7	N/A	N/A	N/A	N/A	N/A	N/A
InSpec N10	N/A	N/A	N/A	N/A	N/A	N/A

## InSpec Range

Sterile Polyester Wipes Part Numbers

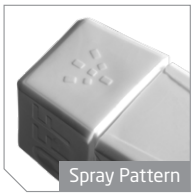
InSpec® Sterile IPA Polyester Wipes						
Wipe Products	Sterile Peel Back 15 Wipes 9"	No. per case	Sterile Peel Back 20 Wipes 12"	No. per case	Sterile Peel Back 30 Wipes 12"	No. per case
InSpec IPA	IPAWF115POL9	25	IPAWF120POL12	10	IPAWF130POL12	10



If a product option is designated as N/A this means Redditch Medical does not manufacture or stock this combination. However, if this is a product you require, please contact us to explore technical and commercial feasibility.

# InSpec® Biocides Trigger Spray Technology

**1 Three Nozzle Settings**



**2 Ergonomic Trigger**

**3 Anti-tamper locking neck - avoids refilling**

**4 Ink jet coded:**  
Date of Manufacture  
Batch No.  
Expiry Date

**5 Polypropylene outer case**

**6 Inner collapsible liner**  
see over for explanation



500ml Version

1 Litre Version



Non-sterile



Sterile

**7 End user write-on panels**

DATE OPENED:	DISCARD BY:
<input type="text"/>	<input type="text"/>

**InSpec® Biocides**

## Trigger Spray Technology

---

**Inner collapsible liner**

This liner enables the contents to be sprayed out without drawing air into the contents, maintaining sterility throughout use and is qualified for 3 months.



Full and sterile

Used for up to 3 months

Empty and sterile

**InSpec® Biocides**

# Technical Data of InSpec Products by Chemistry

## Alcohol



## InSpec® IPA

### Sterile Isopropyl Alcohol 70% v/v with WFI Quality Water

Rapid Action, Low Residue, Fast Drying Alcohol Disinfectant

#### Use Instructions

InSpec® IPA is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping. Apply to surface to ensure complete coverage. For screw cap bottles use the entire contents after opening.

#### Technical Data

Appearance: Clear liquid free from particles. Specific Gravity (20°C): 0.872 to 0.883. Alcohol proportion: 70% +/- 2% v/v.

#### Storage & Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

#### Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

#### Benefits

- Low residue
- Rapid action
- Bactericidal and Fungicidal
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with Premium range
- Contents protected using filtered trigger presentation with standard range
- All formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Ideal surface and aseptic transfer disinfectants
- Manufactured in accordance with GMP

#### Technical User Information

InSpec® IPA is a sterile ready to use disinfectant. This is a 70% v/v alcohol solution in WFI quality water.

InSpec® IPA is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process (at 25-45kGy) to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec® IPA is supplied with Certificates of Conformity, Analysis and sterile versions also have certificates of Irradiation Sterility and Endotoxin. All formats of IPA have a stabilised 24 month shelf life.

#### Sachet Wipes

InSpec® IPA tear open sachets for single use wiping applications.

#### Pouch Wipes - Polycellulose

InSpec® IPA peel open pouch Wipes are high specification, low linting cleanroom wipes.

#### Tub Wipes

InSpec® IPA Tub Wipes, an economical solution for wiping applications.

#### Pouch Wipes - Polyester

InSpec® IPA Knitted Polyester Wipes are high specification, laser cut, ultra low linting cleanroom wipes.

InSpec® IPA Sterile Products		
Product	Sterile Part No.	No. per case
InSpec IPA 1L PREMIUM Trigger Spray	IPAWFI1-1LS	6
InSpec IPA Triple Bagged Trigger Spray	IPAWFI3-1LS	6
InSpec IPA 500ML PREMIUM Trigger Spray	IPAWFI-500MLS	8
InSpec IPA 5L	IPAWFI-5LS	2
InSpec IPA 15 Pouch Wipes	IPAWFIPCH15S	25
InSpec IPA 50 Pouch Wipes	IPAWFIPCH50S	16
InSpec IPA Tub Wipes - 200 wipes/roll	IPAWFI12TB200S	12
InSpec IPA PREMIUM Tub Wipes - 130 wipes/roll	IPAWFI12TB130S	12
InSpec IPA Polyester 15 Wipes	IPAWFI15POL9	25
InSpec IPA Polyester 20 Wipes	IPAWFI20POL12	10
InSpec IPA Polyester 30 Wipes	IPAWFI30POL12	10
InSpec IPA Sachet - Individual Wipes	IPAWFIPCH-1S	10 x 50

InSpec® IPA Non-Sterile Products	
Non-Sterile Part No.	No. per case
NSIPAWFI-1L	6
N/A	N/A
NSIPAWFI-500ML	8
NSIPAWFI-5L	2
NSIPAWFIPCH15	25
NSIPAWFIPCH50	16
NSIPAWFI12TB200	12
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
Polycellulose 68gsm	230 x 230
Polycellulose 68gsm	230 x 230
Polycellulose 23gsm	200 x 200
Viscose 45gsm	200 x 185
Knitted Polyester	230 x 230
Knitted Polyester	300 x 300
Knitted Polyester	300 x 300
Polycellulose 55 gsm	190 x 160

## InSpec® Biocides

## Technical Data of InSpec Products by Chemistry

## Alcohol

## InSpec® DE

## Sterile Denatured Alcohol 70% v/v with WFI Quality Water

Rapid Action, Low Residue, Fast Drying Alcohol Disinfectant



## Use Instructions

InSpec® DE is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from wipe/area to be treated.

5L versions, pour all contents into an appropriate container for mopping. Apply to surface to ensure complete coverage. Wipes - access wipes via peel back opening, resealing as necessary. Sachets tear open.

## Technical Data

Appearance: Clear liquid free from particles. Specific Gravity (20°C): 0.880 to 0.888. Denatured Ethanol proportion: 70% +/- 2% v/v.

## Storage &amp; Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

## Efficacy

See summary table in Section 1 of this brochure.

## Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

## Benefits

- Low residue
- Rapid action
- Bactericidal and Fungicidal
- 1 Litre Trigger Spray has 3 months validated 'in-use' shelf life as contents are protected via 'bag-in-bottle' technology
- All formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Ideal surface and aseptic transfer disinfectants
- Manufactured in accordance with GMP

## Technical User Information

InSpec® DE is a sterile ready to use disinfectant.

This is a 70% v/v denatured ethanol (TSDA 7) solution in WFI quality water.

InSpec® DE is manufactured in accordance with GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process (at 25-45kGy) to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec® DE is supplied with Certificates of Conformity, Analysis and sterile versions also have certificates of Irradiation Sterility and Endotoxin. All formats of DE have a 24 month shelf life.

## InSpec® DE Sterile Products

Product	Sterile Part No.	No. per case
InSpec DE 1L PREMIUM Trigger Spray	DEWF110-1LS	6
InSpec DE 1L JET Trigger Spray	DEWF11-1JET	6
InSpec DE 500ML PREMIUM Trigger Spray	DEWF111-500MLS	8
InSpec DE 5L	DEWF110-5LS	2
InSpec DE 15 Pouch Wipes	DEWFIPCH15S	25
InSpec DE 50 Pouch Wipes	DEWFIPCH50S	16
InSpec DE Tub Wipes - 200 wipes/roll	DEWF112TB200S	12
InSpec DE PREMIUM Tub Wipes - 130 wipes/roll	DEWF112TB130S	12

## InSpec® DE Non-Sterile Products

Non-Sterile Part No.	No. per case
NSDEWFI-1L	6
N/A	N/A
NSDEWFI-500ML	8
NSDEWFI-5L	2
NSDEWFIPCH15	25
NSDEWFIPCH50	16
NSDEWF112TB200	12
N/A	N/A

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
Polycellulose 68gsm	230 x 230
Polycellulose 68gsm	230 x 230
Polycellulose 23gsm	200 x 200
Viscose 45gsm	200 x 185

**InSpec® Biocides**

# Technical Data of InSpec Products by Chemistry

## Aqueous High Level Disinfectant

### InSpec® AN

#### Sterile Diamine, Disinfectant Cleaner

Low Residue, Quat Free Disinfectant/Cleaner, Broad Spectrum Disinfectant



**Use Instructions**

InSpec® AN is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping. 100ml concentrate added to 2.5L of water is required for mopping. Apply to surface to ensure complete coverage.

**Technical Data**

Alcohol, chlorine and QUAT-free disinfectant cleaner. 4% RTU Solution, pH 8.8-9.2, Concentrate pH 10.0.

**Storage & Safe Handling**

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

**Efficacy**

See summary table in Section 1 of this brochure.

**Material Compatibility**

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

**Benefits**

- An exceptional non-oxidising biocide
- Bactericidal and Fungicidal
- Clean and disinfects
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with premium range
- 1L and 5L formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Ideal rotational partner for InSpec QT, HA and OX
- Manufactured in accordance with GMP

**Technical User Information**

InSpec® AN is a sterile disinfectant in pre-diluted and concentrated formats. InSpec® AN is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process (at 25-45kGy) to give a sterility assurance level SAL of 10<sup>-6</sup>.

Trigger sprays supplied with 900ml solution in a 1L container.

InSpec® AN is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility. All formats of AN have a stabilised 24 month shelf life.

For screw cap bottles use the entire contents after opening.

InSpec® AN Sterile Products		
Product	Sterile Part No.	No. per case
InSpec AN 900MLS PREMIUM	ANWFI20-1LS	6
InSpec AN 5L	ANWFI20-5LS	2
InSpec AN Concentrate	ANCNC20-100	50
InSpec AN Burstable Pouch - 15 wipes	ANWFI20BP15S	20

InSpec® AN Non-Sterile Products	
Non-Sterile Part No.	No. per case
NSANWFI-1L	6
NSANWFI-5L	2
NSANCONC-100ML	50
N/A	N/A

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
Polycellulose 68gsm	230 x 230

**InSpec® Biocides****Technical Data of InSpec Products by Chemistry****Aqueous High Level Disinfectant****InSpec® QT****Sterile Quaternary Ammonium Compound, Disinfectant Cleaner**

Exceptional Quat disinfectant with proven efficacy against a wide range of Bacteria, Yeast and Fungi.

**Use Instructions**

**InSpec® QT** is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping. 100ml concentrate added to 2.5L of water is required for mopping. Apply to surface to ensure complete coverage.

**Technical Data**

Aldehyde-free disinfectant cleaner.  
4% RTU Solution pH 11.8-12.2  
Concentrate pH 12.9.

**Storage & Safe Handling**

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

**Efficacy**

See summary table in Section 1 of this brochure.

**Material Compatibility**

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

**Benefits**

- An exceptional non-oxidising biocide
- Bactericidal and Fungicidal
- Clean and disinfects in the presence of dirt, blood and proteins.
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with premium range
- 1L and 5L formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Ideal rotational partner for InSpec AN, HA and OX
- Manufactured in accordance with GMP

**Technical User Information**

**InSpec® QT** is a sterile disinfectant in pre-diluted and concentrated formats. **InSpec® QT** is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process (at 25-45kGy) to give a sterility assurance level SAL of 10<sup>-6</sup>.

Trigger sprays supplied with 900ml solution in a 1L container.

**InSpec® QT** is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility.

All formats of QT have a stabilised 24 month shelf life.

For screw cap bottles use the entire contents after opening.

**InSpec® QT Sterile Products**

Product	Sterile Part No.	No. per case
InSpec QT 900MLS PREMIUM Trigger Spray	QTWFI30-1LS	6
InSpec QT 5L	QTWFI30-5LS	2
InSpec QT Concentrate	QTCNC30-100	50
InSpec QT Burstable Pouch - 15 wipes	QTWFI30BP15S	20
InSpec QT Burstable Mop - 2 EFB 40 Mops	2116008	5

**InSpec® QT Non-Sterile Products**

Non-Sterile Part No.	No. per case
NSQTWFI-1L	6
NSQTWFI-5L	2
NSQTCONC-100ML	50
N/A	5
2116007	5

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
Polycellulose 68 gsm	230 x 230
100% Polyester microfibre	400 x 100



**InSpec® Biocides**

# Technical Data of InSpec Products by Chemistry

## Aqueous High Level Disinfectant



# InSpec® QT+

## Quaternary Ammonium Compound, Disinfectant Cleaner

Exceptional Quat disinfectant with proven efficacy against a wide range of Bacteria, Yeast and Fungi.

### Use Instructions

InSpec® QT+ is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping. 102ml concentrate make up to 5L with WFI Water. Apply to surface to ensure complete coverage.

### Technical Data

Formulated Quaternary Ammonium Compound based disinfectant/cleaner. Active ingredient 0.12% RTU (ready to use). RTU pH = 10.5 to 11.5. Concentrate pH = 12.5 to 13.5.

### Storage & Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

### Efficacy

See summary table in Section 1 of this brochure.

### Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

### Benefits

- An exceptional non-oxidising biocide
- Bactericidal and Fungicidal
- Low residue
- Contents protected using 'bag-in-bottle' technology. Provides a validated 3 month 'in-use' shelf life.
- 1L and 5L formats manufactured with WFI quality water
- Double bagged to enable rapid cleanroom transfer
- Ideal rotational partner for InSpec AN, HA, OX and HPX products

### Technical User Information

InSpec® QT+ is available as a sterile or non-sterile disinfectant in pre-diluted and concentrated formats.

InSpec® QT+ is manufactured in accordance with GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and gamma irradiated via a validated process (at 25-45kGy) providing a sterility assurance level SAL of 10<sup>-6</sup>.

Trigger sprays supplied with 900ml solution in a 1L container.

InSpec® QT+ is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility. All formats of QT have a stabilised 24 month shelf life.

For screw cap bottles use the entire contents after opening.

InSpec® QT+ Sterile Products		
Product	Sterile Part No.	No. per case
InSpec QT+ 900mls Premium Trigger Spray	QTPLWFI31-900MLS	6
InSpec QT+ 5L	QTPLWFI31-5LS	2
InSpec QT+ Concentrate 102ml	QTPLCNC-102	50
InSpec QT+ Burstable Pouch Wipes - 15 wipes	QTPLWFI31BP15S	20

InSpec® QT+ Non-Sterile Products	
Non-Sterile Part No.	No. per case
NSQTPLWFI-1L	6
NSQTPLWFI-5L	2
NSQTPLCNC-102	50
N/A	N/A

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

## InSpec® Biocides

## Technical Data of InSpec Products by Chemistry

## Aqueous Sporicidal Agents

## InSpec® HPX

## Sterile Surface Preparation 7% Hydrogen Peroxide blended with 1% Diamine &amp; Non-ionic Surfactants in Purified Water

**Use Instructions**

InSpec® HPX is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping.

**Technical Data**

Appearance: Colourless, odourless, clear liquid. pH 2-3.

**Storage & Safe Handling**

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

**Efficacy**

See summary table in Section 1 of this brochure.

**Material Compatibility**

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

**Benefits**

- One of the most common disinfectants available on the market
- Stabilised solution - 12 months shelf life
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with premium range.
- 1L and 5L and burstable wipes and mops formats available in Ready to Use dilution form.
- Multiple bags for cleanroom transfer
- Ideal rotational partner for InSpec QT and AN
- Manufactured in accordance with GMP

**Technical User Information**

InSpec® HPX is a sterile sporicide available ready to use.

InSpec® HPX is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and aseptically filled into pre-gamma irradiated packaging (25-45kGy) and tested to give a sterility assurance level SAL of  $10^{-6}$ .

InSpec® HPX is supplied with a certificate of conformity and analysis and sterility.

For screw cap bottles use the entire contents after opening.

**InSpec® HPX Sterile Products**

Product	Sterile Part No.	No. per case
InSpec HPX 1L PREMIUM Trigger Spray	HPXWF1160-1LS	6
InSpec HPX 5L	HPXWF1160-5LS	2
InSpec HPX Burstable Mop - 2 EF40 Mops	2116010	5

**InSpec® HPX Non-Sterile Products**

Non-Sterile Part No.	No. per case
N/A	N/A
N/A	N/A
2116009	5

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
100% Polyester microfibre	400 x 100

**InSpec® Biocides**

# Technical Data of InSpec Products by Chemistry

## Aqueous Sporicidal Agents



# InSpec® OX

## Sterile Sporicidal Preparation Hydrogen Peroxide 6% v/v and Peracetic Acid 0.4% v/v

Rapid action - two minute kill time. Achieves the EN sporicidal standard - 3 log reduction in 2 minutes

### Use Instructions

InSpec® OX is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping.

### Technical Data

Appearance: Colourless clear liquid with a characteristic strong acetic odour. pH 1.4.

### Storage & Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

### Efficacy

See summary table in Section 1 of this brochure.

### Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

### Benefits

- One of the most effective sporicides available on the market
- All formats classed as an irritant.
- Low Hazard
- Stabilised solution - 24 months shelf life
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with premium range
- 1L and 5L formats available as Ready to Use
- Multiple bags for cleanroom transfer
- Ideal rotational partner for InSpec QT and AN
- Manufactured in accordance with GMP

### Technical User Information

InSpec® OX is a sterile sporicide available ready to use.

InSpec® OX is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and aseptically filled into pre-gamma irradiated packaging (25-45kGy) and tested to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec® OX is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility. All formats of OX have a stabilised 24 month shelf life.

For screw cap bottles use the entire contents after opening.

InSpec® OX Sterile Products		
Product	Sterile Part No.	No. per case
InSpec OX 1L PREMIUM Trigger Spray	OXPW40-1LS	6
InSpec OX 5L	OXPW40-5LS	2
InSpec OX Burstable Pouch - 15 wipes	OXPW40BP15S	20
InSpec OX Burstable Mop - 2 EF40 Mops	2116004	5

InSpec® OX Non-Sterile Products	
Non-Sterile Part No.	No. per case
NSIOXPW-1L	6
NSOXPW-5L	2
N/A	N/A
2116003	5

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
100% Polyester microfibre	400 x 100

## InSpec® Biocides

## Technical Data of InSpec Products by Chemistry

## Aqueous Sporicidal Agents

## InSpec® HA

**Sterile Sporicidal Preparation of Hypochlorous Acid (HC<sub>10</sub> ⇌ OCl<sup>-</sup> + H<sup>+</sup>) Low odour, safe handling, low residue and fully effective**

**Use Instructions**

InSpec® HA is designed for spraying, wiping and mopping applications. Hold spray approximately 15cm to 20cm from area to be treated. 5L versions, pour into an appropriate container for mopping.

**Technical Data**

Appearance: Colourless aqueous solution with a characteristic mild chlorine odour. pH 6.5 to 7.5.

**Storage & Safe Handling**

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

**Efficacy**

See summary table in Section 1 of this brochure.

**Material Compatibility**

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

**Benefits**

- One of the safest and fully effective sporicides. All formats are non hazardous
- Very low residue, corrosion and odour
- Stabilised solution - 12 months shelf life
- 3 months validated 'in-use' shelf life
- Contents protected using 'bag-in-bottle' presentation with premium range.
- 1L and 5L formats available as Ready to Use
- Multiple bags for cleanroom transfer
- Ideal rotational partner for InSpec QT and AN
- Manufactured in accordance with GMP

**Technical User Information**

InSpec® HA is a sterile sporicide available ready to use.

InSpec® HA is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

The solution is filtered through a 0.2 micron filter and aseptically filled into pre-gamma irradiated packaging (25-45kGy) and tested to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec™ HA is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility.

All formats of HA have a stabilised 12 month shelf life.

For screw cap bottles use the entire contents after opening.

**InSpec® HA Sterile Products**

Product	Sterile Part No.	No. per case
InSpec HA 1L PREMIUM Trigger Spray	HAPW50-1LS	6
InSpec HA 5L	HAPW50-5LS	2
InSpec HA Burstable Pouch - 15 wipes	HAPW50BP15S	20
InSpec HA Burstable Mop - 2 EFB 40 Mops	2116002	5

**InSpec® HA Non-Sterile Products**

Non-Sterile Part No.	No. per case
NSHAPW-1L	6
NSHAPW-5L	2
N/A	N/A
2116001	5

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
Polycellulose 68 gsm	230 x 230
100% Polyester microfibre	400 x 100

InSpec®

# Technical Data of InSpec Products by Chemistry

Aqueous Cleaning Detergents



## InSpec® N7

### Low Toxicology, pH Neutral Detergent Solution

#### Use Instructions

InSpec® N7 is designed for cleaning hard surfaces by spraying, wiping and mopping. Hold spray approximately 15cm to 20cm from the surface area. 5L versions, pour into an appropriate container for mopping. 100ml concentrate added to 2.5L of water is required for mopping. Apply to surface to ensure complete coverage.

#### Technical Data

N7 Ready to Use (RTU) is a 4% neutral detergent, pH7. The neutral detergent has surfactant and sequestering agents designed to assist the removal of process residue and light soiling in a cleanroom environment.

#### Storage & Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

#### Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered. Compatibility information in the Technical Dossier.

#### Benefits

- Designed for cleaning floors, walls, ceiling and other hard surfaces for the removal of process derived residue and light soiling.
- Ideal for critical surfaces with soiling near to product manufacturing
- Very low foaming, low residue
- detergent with an excellent low toxicology profile
- Suitable for manual cleaning and available in convenient ready to use and concentrate formats.
- Low concentration
- 3 months validated 'in-use' shelf life
- All formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Manufactured in accordance with GMP

#### Technical User Information

InSpec® N7 is available in sterile RTU pre-diluted formats and as a concentrate.

InSpec® N7 is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

RTU solutions are diluted with WFI quality water.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec® N7 is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility.

For screw cap bottles use the entire contents after opening.

#### InSpec® N7 Sterile Products

Product	Sterile Part No.	No. per case
InSpec N7 1L PREMIUM Trigger Spray	N7WF1CC-1LS	6
InSpec N7 5L	N7WF1-5LS	2
InSpec N7 Concentrate - 100ml	N7WF1-100MLS	50
InSpec N7 Pre-impregnated Wipes x 15	N7WFIPCH15S	25
InSpec N7 Pre-impregnated Wipes x 50	N7WFIPCH50S	16

#### InSpec® N7 Non-Sterile Products

Non-Sterile Part No.	No. per case
NSN7WF1-1L	6
NSN7WF1-5L	2
NSN7CONC-100ML	50
N/A	N/A
N/A	N/A

Wipe Media Type	Individual wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A

InSpec®

# Technical Data of InSpec Products by Chemistry

## Aqueous Cleaning Detergents



## InSpec® N10

### Manual Detergent Pre-Diluted and Concentrate Solutions

An alkaline detergent and hard surface cleaner for use in the biopharmaceutical and cleanroom industries.

#### Use Instructions

InSpec® N10 is designed for cleaning hard surfaces by spraying, wiping and mopping. Hold spray approximately 15cm to 20cm from the surface area. 5L versions, pour into an appropriate container for mopping. 100ml concentrate added to 2.5L of water is required for mopping. Apply to surface to ensure complete coverage.

#### Technical Data

N10 Ready to Use (RTU) is a 4% alkaline detergent, pH12. The concentrate presentation has a pH of >13. The alkaline detergent has surfactant and sequestering agents designed to assist the removal of process residue and general soiling.

#### Storage & Safe Handling

Store upright in original closed containers, away from sunlight and extremes of temperature. Full guidance on the handling and disposal of this product is available in the Safety Data Sheet (SDS).

#### Material Compatibility

Application of solutions, when used as directed, will not affect materials normally encountered in the cleanroom. See compatibility information in the Technical Dossier.

#### Benefits

- Designed for cleaning floors, walls, ceiling and other hard surfaces for the removal of general process derived residue and soiling.
- Rapid action alkaline detergent. Suitable for manual cleaning.
- Available in convenient ready to use formats.
- 3 months validated 'in-use' shelf life 1L and 5L formats manufactured with WFI quality water
- Multiple bags for cleanroom transfer
- Manufactured in accordance with GMP

#### Technical User Information

InSpec® N10 is available as a sterile and non-sterile detergent in pre-diluted and concentrated formats.

InSpec® N10 is manufactured to GMP in an ISO 6 cleanroom. The product is filled and capped in an ISO class 5 environment.

RTU solutions are diluted with WFI quality water.

The solution is filtered through a 0.2 micron filter and gamma irradiated to a validated process (at 25-45kGy) to give a sterility assurance level SAL of 10<sup>-6</sup>.

InSpec® N10 is supplied with Certificates of Conformity, Analysis, Irradiation and Sterility.

For screw cap bottles use the entire contents after opening.

InSpec® N10 Sterile Products		
Product	Sterile Part No.	No. per case
InSpec N10 900mls PREMIUM Trigger Spray	N10WFI1CC-1LS	6
InSpec N10 5L	N10WFI1-5LS	2
InSpec N10 Concentrate - 100ml	N10WFI1-100MLS	50
InSpec N10 Concentrate - 1L	N/A	N/A
InSpec N10 Burstable Mop - 2 EFB 40 Mops	2116012	5

InSpec® N10 Non-Sterile Products	
Non-Sterile Part No.	No. per case
NSN10WFI-1L	6
NSN10WFI-5L	2
NSN10CONC-100ML	50
NSN10CONC-1L	6
2116011	5

Wipe Media Type	Individual Wipe size (mm)
N/A	N/A
N/A	N/A
N/A	N/A
N/A	N/A
100% Polyester microfibre	400 x 100









# InTact®

Solutions Delivered by Innovation

Redditch Medical has a new division

## InTact® GMP Cleaning Detergents

# CIP & COP Cleaning doesn't need to cost the earth

When Redditch Medical set out to design a new range of CIP and COP detergents for GMP use, our development was entirely focused on the pharmaceutical industry and the environment.

All InTact® detergent formulations - Acid, Alkaline or Neutral - have the following characteristics:

- 🌱 Biodegradable surfactants and chelants
- 🌱 Manufactured in the UK to ISO 9001 & ISO 14001
- 🌱 Releasable toxicology and formulation profiles
- 🌱 Pre-qualified analytical detection methods - TOC and ICP-MS
- 🌱 Rapid rinsing
- 🌱 Range of size formats to cope with all application scales
- 🌱 Low foaming
- 🌱 Designed to work with DI/RO/Purified and WFI quality water

### Redditch Medical's Optimisation Service

A free of charge laboratory-based service in which stainless steel or glass coupons representing an end-users actual drug and excipient soiling are tested in our laboratory to determine which cleaning agent should be used and under what parameters - time, action, concentration, and temperature - mimicking real world cleaning process conditions. This is why our product is called InTact®.

The results from these studies assist by minimising the amount of product used and thus further reduce environmental impact. It additionally provides users with both a rationale behind product selection and an optimised starting point to move to field scale evaluation.

All Redditch Medical brands start with 'In'.  
Other brands are InSpec and InTest.

## InTACT

**Time** Cleaning process time  
**Action** Spray, Immersion (energy)  
**Chemistry & Concentration**  
**Temperature**

# InTact®

Solutions Delivered by Innovation

For more information about our InTact™ range of detergents, please contact: [intact@redditchmedical.com](mailto:intact@redditchmedical.com)  
or call us on +44 (0) 740 623379

[redditchmedical.com](http://redditchmedical.com)

## Redditch Medical

# Further Information

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If you would like any further information about Redditch Medical, or would like to enquire about our products and services, please call our sales team via:

Tel: **+44 (0) 1740 623379**

E-mail: [sales@redditchmedical.com](mailto:sales@redditchmedical.com)

Or fill in the enquiry form on our website

[www.redditchmedical.com](http://www.redditchmedical.com)



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**InSpec®**  
Solutions Delivered by Experience