



The first place to look when you need a quality sterile wipe









Whatever grade of cleanroom

However large or small

Whatever the application

However often you clean and disinfect

Shield Medicare has a sterile wipe tailored to your cleanroom environment.



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Klerwipe 70/30 Sterile Alcohol Impregnated Wipes

Range of sterile 100% knitted polyester and low particulate wipes impregnated with spore free alcohol.

Advantages

Rapid and effective application

The highly absorbent wipes allow a rapid clean down of surfaces, equipment and production components. The wipes remain wet throughout use ensuring a consistent application of alcohol to the whole surface area. The use of wiping can improve the effectiveness of the cleaning & disinfection procedure.



Easy and safe to use

The Klerwipes are folded to make them easy to remove from the pouch, even when wearing gloves. Using an impregnated wipe eliminates overspraying of alcohol, reducing the risk of inhalation, especially in tight working spaces.

Ideal for sterile environments

Each double bagged resealable pouch contains only 15 low particulate wipes, which is sufficient for most uses without compromising sterility.

Suitable for direct product contact use

The alcohol will evaporate completely and the wipes do not contain any chemical binders, so no undesirable residues remain. This makes the Klerwipe 70/30 alcohol wipes particularly suitable for use on surfaces directly in contact with the product, where residues are unacceptable.

Formats for all needs

There is selection of sterile alcohol impregnated wipes to suit different purposes. The pouch wipes are available in either standard 200mm x 200mm size or large 300 x 300mm sizes. There is also a choice between either 100% polyester or low particulate wipes. The wipes are impregnated with either 70% v/v IPA or denatured ethanol (IMS) blended with deionised water. In addition there are individual sachet wipes and tub wipes in various sizes.

Description

All the different wipes are impregnated with 0.2 micron filtered alcohol, packed and double bagged in a Grade C (ISO Class 7) cleanroom, irradiated using a validated process at no less than 25kGy.

The wipes are impregnated with a choice of Klercide 70/30 IPA, a blend of 70% v/v Isopropyl Alcohol with deionised water, or Klercide 70/30 Denatured Ethanol (IMS), 70% v/v denatured ethanol blended with deionised water.

The 100% polyester pouch wipes are 115gsm circular knit polyester. The low particulate wipes are made from a 68gsm binder free, hydroentangled cellulose/polyester blend. Tub wipes are a low particulate non woven wipe.

Pouch wipes

Each pouch contains 15 wipes so there is no wastage at the end of a manufacturing session. The polythene packaging features "Klertear" which makes it easy to open even when wearing gloves. The pouch is easily resealable to prevent the wipes drying out. The pouch itself does not generate any particles. 100% circular knit IPA wipes are available and also low particulate wipes, with either 70% v/v IPA or denatured ethanol (IMS).

The Klerwipe 70/30 alcohol pouches are also available in vaporised hydrogen peroxide impermeable packaging for use in gassing isolators.

Sachet wipes

Individually packed low particulate wipes, folded in an easy to open foil pack. 50 foil packs are then double bagged before gamma irradiation. The foil pack eliminates lint when opening.

Tub wipes

Two types of tub wipe are available, a high quality 42gsm polyester/cellulose blend wipe or a 22gsm non woven wipe are available in a resealable tub with a low shedding aperture. Each tub is supplied double bagged and gamma irradiated. The tub contains 100 or 200 wipes respectively.



Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC Accredited company.

Certificates of analysis, irradiation and Sterility available with every batch.

2 year shelf life.

Product Codes

Pouch Wipes

Klerwipe 70/30 Sterile Alcohol Impregnated 100% Polyester Wipes

Code	Description	Size mm	Unit of Sale
WPL6500	Klerwipe 70/30 WFI Sterile 70% IPA 100% Polyester Wipe	200 x 200	20 packs x 15 wipes

Klerwipe 70/30 Sterile Alcohol Impregnated Low Particulate Wipes

Code	Description	Size mm	Unit of Sale
WPK2500	Klerwipe 70/30 Sterile IPA Low Particulate Wipe Also available with VHP impermeable pack.	200 x 200	20 packs x 15 wipes
WPK3500	Klerwipe 70/30 Sterile IPA Low Particulate Wipe Also available with VHP impermeable pack.	300 x 300	20 packs x 15 wipes
WPK2505	Klerwipe 70/30 Sterile IMS Low Particulate Wipe	200 x 200	20 packs x 15 wipes
WPK3505	Klerwipe 70/30 Sterile IMS Low Particulate Wipe	300 x 300	20 packs x 15 wipes

Sachet Wipes

Klerwipe 70/30 Sterile Alcohol Impregnated Low Particulate Wipes

Code	Description	Size mm	Unit of Sale
WPK923	Klerwipe 70/30 Sterile IPA Low Particulate Wipe	190 x 145	10 units x 50 sachets
WPK925	Klerwipe 70/30 Sterile IMS Low Particulate Wipe	190 x 145	10 units x 50 sachets

Tub Wipes

Klerwipe Sterile Alcohol Impregnated Tub Wipes

Code	Description	Gsm	Size mm	Unit of Sale
WPK4100	Klerwipe 70/30 Sterile IPA Low Particulate Tub Wipe	42	200 x 230	15 x 100 wipes
WPK4105	Klerwipe 70/30 Sterile IMS Low Particulate Tub Wipe	42	200 x 230	15 x 100 wipes
WPK3900	Klerwipe 70/30 Sterile IPA Low Particulate Tub Wipe	22	200 x 230	15 x 200 wipes
WPK3905	Klerwipe 70/30 Sterile IMS Low Particulate Tub Wipe	22	200 x 230	15 x 200 wipes



Klerwipe-CR Sterile Biocide Impregnated Wipes

Sterile low particulate wipes impregnated with either Klercide-CR Biocide A, B, C or D in a convenient resealable pouch.

Advantages

Very effective biocides including good sporicidal activity

Klercide-CR Biocide B and C will control most risks of contamination including difficult bacterial spores. Klercide-CR Biocide A and D have broad spectrum activity. The four biocides can be used effectively in rotation.

Rapid and effective application

The highly absorbent wipes allow a rapid clean down of surfaces, equipment and production components. The wipes remain wet throughout use ensuring a consistent application of



biocide to the whole surface area. The use of wiping can improve the effectiveness of the cleaning and disinfection procedure.

Easy and safe to use

The polythene packaging for Biocide A and Biocide D features "Klertear" which makes it easy to open even when wearing gloves. The Klerwipes are folded to make them easy to remove from the pouch. All biocides are non-toxic, non-irritant and non-corrosive under normal use, so can be used safely in most cleanroom applications. Using wipes in critical areas, such as isolators, reduces the risk of corrosion, as most of the biocide is removed from the surface.

Ideal for sterile environments

Each double bagged resealable pouch contains only 15 low particulate wipes, which is sufficient for most uses without compromising sterility.



Description

The wipes are impregnated with a choice of Klercide-CR Biocide A, a quaternary ammonium / biguanide blend, Klercide-CR Biocide B, a blend of stabilised chlorine dioxide and a quaternary ammonium compound, Klercide-CR Biocide C, a blend of 6% hydrogen peroxide and deionised water or Klercide-CR Biocide D, an amphoteric surfactant.

The wipes are packed in a Grade C (ISO Class 7) cleanroom and provided sterile either gamma irradiated, or aseptically processed to a validated procedure. Each pouch is supplied double bagged.

The 200mm x 200mm wipes are made from 68gsm binder free, hydroentangled cellulose/polyester blend.

Each pouch contains 15 wipes so there is no wastage at the end of a manufacturing session. The pouch is easily resealable to prevent the wipes drying out. The pouch itself does not generate any particulate contamination.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of analysis, irradiation and sterility are available for every batch of Klerwipe-CR Biocide A and Biocide D.

Certificates of analysis and sterility are available for every batch of Klerwipe-CR Biocide B and Biocide C.

- 2 year shelf life for Biocide A and Biocide D
- 1 year shelf life for Biocide B and Biocide C.

Product Codes

Klerwipe-CR Sterile Biocide Impregnated Low Particulate Wipes

Code	Description	Size mm	Unit of Sale
WPK2515	Klerwipe-CR Sterile Biocide A Low Particulate Wipe	200 x 200	20 packs x 15 wipes
WPK2525	Klerwipe-CR Sterile Biocide B Low Particulate Wipe	200 x 200	20 packs x 15 wipes
WPK2535	Klerwipe-CR Sterile Biocide C Low Particulate Wipe	200 x 200	20 packs x 15 wipes
WPK2545	Klperwie-CR Sterile Biocide D Low Particulate Wipe	200 x 200	20 packs x 15 wipes



Klerwipe Sterile WFI 100% Polyester Wipe

Sterile 100% polyester wipes presaturated with Water for Injection, in a convenient resealable pouch.

Advantages

Rapid and effective application

The highly absorbent wipes allow a rapid wipe down and rinsing of product contact surfaces, equipment and production components. The wipes remain wet throughout use ensuring a consistent application of Water for Injection to the whole surface area. The use of wiping can improve the effectiveness of the cleaning procedure



Easy and safe to use

The polythene packaging is easy to spray and wipe for efficient transfer. The Klerwipes are folded to make them easy to remove from the pouch.

Ideal for sterile environments

Each double bagged resealable pouch contains only 15 low particulate wipes, which is sufficient for most uses without compromising sterility.

Suitable for direct product contact use

These wipes are designed for the easy wiping down and rinsing of product contact surfaces with a controlled application of Water for Injection.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of conformity, irradiation and sterility are available for every batch.

1 year shelf life.

Product Codes

Klerwipe Sterile WFI 100% Polyester Wipe

Code	Description	Size mm	Unit of Sale
WPL6100	Klerwipe Sterile WFI 100% Polyester Pouch Wipe	200 x 200	20 packs x 15 wipes



Klerwipe-CR Sterile Klerclean Neutral Detergent Wipe

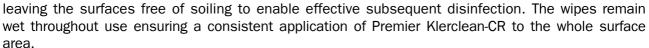
Advantages

Very effective

Premier Klerclean-CR Sterile Neutral Detergent is particularly effective on oily and sticky spillages or following general maintenance. It is suitable for surface cleaning in gassing isolators.

Rapid and effective application

The highly absorbent wipes allow a rapid clean down of surfaces, equipment and production components,





Easy and safe to use

The polythene packaging is easy to spray and wipe for efficient transfer and features "Klertear" which makes it easy to open even when wearing gloves. Premier Klerclean-CR is non-toxic, non-irritant and non-corrosive under normal use, so can be used safely in most cleanroom applications.

Ideal for sterile environments

Each double bagged resealable pouch contains only 15 low particulate wipes, which is sufficient for most uses without compromising sterility.

Suitable for direct product contact use

Premier Klerclean-CR is a sterile non-ionic, low foaming neutral detergent, with low residues that are easily removed with rinsing.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of conformity, irradiation and sterility are available for every batch.

1 year shelf life.

Product Code

Code	Description	Size mm	Unit of Sale
WPK2551	Klerwipe-CR Sterile Klerclean Neutral Detergent Low Particulate Pouch Wipe	200 x 200	20 packs x 15 wipes

10



Klerwipe-CR Sterile Silicone Wipe

Advantages

Very effective lubricant

Silicone provides excellent non-sticky lubrication for moving parts, such as filling lines, pumps and isolator cabinet seals.

Rapid and effective application

The highly absorbent wipes allow rapid and accurate coverage. The wipes remain wet throughout use ensuring a consistent application of silicone.



Ideal for sterile environments

Each sterile, double bagged, resealable pouch contains only 15 low particulate wipes, which is sufficient for most uses without compromising sterility. The wipes are also available in VHP impermeable packaging for use in gassing isolators.

Suitable for direct product contact use

The silicone is carried in Isopropyl Alcohol (IPA), which will evaporate completely, and the wipes do not contain any chemical binders, so only a light coating of silicone will remain.

No excessive build up

The silicone is carried in alcohol which enables a very thin film of silicone to be applied to surfaces, providing sufficient lubrication without an excessive build up.

Easy and safe to use

The polythene packaging is easy to spray and wipe for efficient transfer and features "Klertear" which makes it easy to open even when wearing gloves. The silicone/IPA blend is non-toxic and non-corrosive under normal use, so can be used safely in most cleanroom applications.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of conformity, irradiation and sterility are available for every batch.

2 year shelf life.

Product Codes

Code	Description	Size mm	Unit of Sale
WPK2570	Klerwipe-CR Sterile Silicone Low Particulate Pouch Wipe	200 x 200	20 packs x 15 wipes
WPK2570VHPN	Klerwipe-CR Sterile Silicone Low Particulate Pouch Wipe in VHP Impermeable Packaging	200 x 200	20 packs x 15 wipes



Klerwipe Sterile Impregnated Mop Wipes

Advantages

Convenient

Sterile impregnated mop wipes are the quickest and most convenient method of disinfecting large surface areas. The use of an impregnated wipe saves additional time by eliminating the need to mix concentrate into a solution or use a bucket system. The highly absorbent wipes remain wet throughout use, ensuring a consistent application of fluid to the whole surface area.

Choice of effective alcohols or biocides

The wipes are available impregnated with either 70% v/v IPA or denatured ethanol (IMS). Alternatively, they can be impregnated with two biocides. Klercide-CR Biocide B and C will control most risks of contamination including difficult



bacterial spores. Klercide-CR Biocide A and D have broad spectrum activity. These biocides can be used effectively in rotation. The wipes are also available for cleaning after a spill, or general maintenance, impregnated with Klerclean-CR Neutral Detergent.

Environmentally friendly

The disposal of the used wipe is easier and more environmentally friendly than disposing of unused biocide into the drainage system.

Easy and safe to use

The mop wipes are easy to fix onto the autoclavable lightweight mop frame. All the cleaning fluids are non-toxic and non-corrosive under normal use, so can be used safely in most cleanroom applications. The adjustable mop frame handle allows high ceilings to be reached with ease. The use of impregnated wipes eliminates the potential risk of a dilution error when mixing a concentrate.

Ideal for sterile environments

Each double-bagged pack contains 20 low particulate wipes. The risk of the cleaning fluid becoming contaminated during the process is eliminated.

Description

All the wipes are impregnated with 0.2 micron filtered fluids from the KlercideTM range of disinfectants.

The wipes are impregnated, packed and double bagged in a Grade C (ISO Class 7) cleanroom. They are supplied sterile, either by gamma irradiation at no less than 25kGy or aseptically processed to a validated procedure.

The 420mm x 250mm wipes are made from 68gsm binder-free, hydroentangled cellulose/polyester blend. Each foil pack contains 20 wipes, so there is no wastage at the end of a session. The pealable foil pack minimises any particulate generation when opening.

The wipes are easily fitted to the autoclavable Klercide Mop Wipe Frame that is especially suitable for cleaning walls and floors. This features a swivelling, flat mop designed to wipe into the corners.

The extending handle makes it easy to reach high ceilings and can be adjusted from 1.0m to 1.5m long (3ft to 5ft) for ease of use.

Alcohol Impregnated Wipes

The wipes are impregnated with a choice of Klercide 70/30 IPA: a blend of 70% v/v IPA and deionised water, or Klercide 70/30 denatured ethanol (IMS): 70% v/v denatured alcohol with deionised water.

Biocide Impregnated Wipes

Wipes are impregnated with either Klercide-CR Biocide A, a quaternary ammonium / biguanide blend, Klercide-CR Biocide B, a blend of stabilised chlorine dioxide and a quaternary ammonium compound, Klercide-CR Biocide C, a blend of 6% hydrogen peroxide and deionised water or Klercide-CR Biocide D, an amphoteric surfactant. The biocides are suitable for use in rotation.

Neutral Detergent Impregnated Wipes

Klerclean-CR is particularly effective on oily and sticky spillages or following general maintenance. It is a non-ionic sterile detergent with a pH between 6.7 - 7.3, a mix of deionised water and a fatty alcohol ethoxylate.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of analysis and sterility are available for every batch of wipes.

Certificates of irradiation are available for all wipes except Biocide B and C wipes.

Klerwipe with Biocide B, Biocide C or Neutral Detergent: 1 year shelf life.

Klerwipe with IPA, IMS, Biocide A or Biocide D: 2 year shelf life.

Product Codes

Klercide Cleaning System with Klerwipe Mop Wipes

Code	Description	Size mm	Unit of Sale
KCS505	Klercide Sterile Mop Wipe Frame and Adjustable Handle Handle length: 1.0m to 1.5m (3ft to 5ft)		Each
WPM5000	Klerwipe 70/30 Sterile 70% IPA Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5005	Klerwipe 70/30 Sterile 70% IMS Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5015	Klerwipe-CR Sterile Biocide A Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5025	Klerwipe-CR Sterile Biocide B Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5035	Klerwipe-CR Sterile Biocide C Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5045	Klerwipe-CR Sterile Biocide D Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes
WPM5051	Klerwipe-CR Sterile Klerclean Neutral Detergent Low Particulate Mop Wipe	600 x 250	10 packs x 20 wipes



Klerwipe Sterile Dry Wipes

Sterile low particulate and 100% polyester dry wipes available in different sizes and formats.

Advantages

Suitable for cleanroom use

Double bagged in a Grade C (ISO Class 7) cleanroom before gamma irradiation. Suitable for use in controlled environments such as isolators and laminar flow cabinets. All packaging is designed to minimise the generation of particles.



Flexible Application

Dry Sterile Klerwipes are particularly suitable for all cleaning and disinfection procedures. The amount of cleaning agent can be varied to suit the particular purpose.

Cost effective

All Klerwipe sterile wipes are packed in small quantities to avoid the need to compromise the sterility of a pack, once opened. The wide range of different sizes means there is a wipe suitable for each application, thereby eliminating wastage of unused wipes.

Highly absorbent

All Klerwipes are highly absorbent, making them useful both for applying cleaning solutions and disinfectants and to clean up spills.

Suitable for direct product contact use

The wipes do not contain any chemical binders so do not leave undesirable residues.

Description

The wipes are all packed and double bagged in a Grade C (ISO Class 7) cleanroom before gamma irradiation at no less than 25kGy.

100% polyester wipes are 115gsm circular knit polyester with laser sealed edges. Low particulate wipes are made from a 68gsm binder free, hydroentangled cellulose/polyester blend. Sponge wipes are particulate free and highly absorbent, made from non-abrasive polyurethane foam.

Also available are individually packed low particulate wipes, folded in an easy to open foil pack. 50 foil packs are then double bagged. The foil pack eliminates particulates when opening.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of irradiation with every batch.

3 year shelf life.

Product Codes

Klerwipe Lase	Sterile 100% Polyester Dry Wipe	es			
Code	Description		Size mm	Unit of Sale	
WPL2020	Klerwipe-Laser Sterile 100% Polyester Dry Wipe		230 x 230	10 packs x 10 wipes	
Klerwipe Ster	e Low Particulate Dry Wipes				
Code	Description		Size mm	Unit of Sale	
WPK950	Klerwipe Sterile Low Partic Individually packed in a foil	•	180 x 205	4 units x 50 sachets	
WPK1022	Klerwipe Sterile Low Partic	ulate Dry Wipe*	100 x 100	10 units x 10 wipes	
WPK1022VH	PN Klerwipe Steril Low Particul VHP Proof Packaging	ate Dry Wipe in	100 x 100	10 units x 10 units	
WPK1026	Klerwipe Sterile Low Partic	ulate Dry Wipe*	200 x 200	10 units x 10 wipes	
WPK5026	Klerwipe Sterile Low Partic	ulate Dry Wipe*	200 x 200	10 units x 50 wipes	
WPK1028	Klerwipe Sterile Low Partic	ulate Dry Wipe*	300 x 300	10 units x 10 wipes	
WPK5028	Klerwipe Sterile Low Partic	ulate Dry Wipe*	200 x 200	10 units x 50 wipes	
WPK1030	Klerwipe Sterile Low Partic	ulate Dry Wipe*	400 x 400	10 units x 10 wipes	
WPK1070	Klerwipe Sterile Low Partic	ulate Dry Wipe*	700 x 400	4 units x 25 wipes	
Klerwipe Sterile Sponge Wipes					
Code	Description		Size mm	Unit of Sale	
WPK1818	Klerwipe Sterile Sponge Wipe		200 x 200	25 units x 2 wipes	

^{*} Features "Klertear" which makes it easy to open even when wearing gloves.



Klerwipe Laser Sterile Black 100% Polyester Dry Wipes

For auditing of cleaning procedures in critical environments. The wipe can be used to identify contamination and prove surfaces are clean.

Advantages

Essential tool for cleaning validation

The black 100% polyester wipe easily shows any non-viable particles or powder residue as a light colour against the black, making them especially useful for cleaning validation.



Suitable for cleanroom use

Double bagged in a Grade C (ISO Class 7) cleanroom before sterilisation by gamma irradiation. Suitable for use in controlled environments such as isolators and laminar flow cabinets as they meet the cGMP requirement for only sterile products to be transferred into grade A and B areas. All packaging is designed to minimise the generation of particles.

Allow easy differentiation in different areas

The wipes can be used as a regular polyester cleanroom wipe when contrasting coloured wipes are needed to distinguish between areas.

Suitable for direct product contact use

The wipes are 100% continuous filament polyester with low particulates and extractables. They do not contain any chemical binders so do not leave undesirable residues.

Ideal for training

A useful tool for training and testing operators, they help to improve technique and therefore reduce the risk of batch failures due to contamination.

Cost effective

All Klerwipe sterile wipes are packed in small quantities to avoid the need to compromise the sterility of a pack, once opened, thereby reducing wastage.

Validation

Manufactured by a BS EN ISO 9001:2000, BS EN ISO 13485:2003 and European Medical Device Directive 93/42/EEC accredited company.

Certificates of irradiation with every batch.

3 year shelf life.

Product Codes

Klerwipe Laser Sterile Black 100% Polyester Dry Wipes			
Code	Description	Size mm	Unit of Sale
WPI B2020	Klerwine Laser Sterile Black 100% Polyester Dry Wines	230 x 230	10 packs x 10 wines

Klerwipe[™] 70/30 Sterile Alcohol Impregnated 100% Polyester Wipe Technical Specification

Product Codes WPL6500 Klerwipe 70/30 WFI Sterile 70% IPA Impregnated 100% Polyester Wipe

Physical Properties	Value	Procedure
Material Composition	100% continuous filament polyester fibre with lase	er sealed edges
Colour	White	
Basic Weight	115g/m²	
Extension to break (MD) Extension to break (CD)	120% 160%	
Absorbency Intrinsic Extrinsic Rate	3.04ml/g 320ml/m² <2secs	IES-RP-CC004.2
Chemical Compatibility	Contains no chemical binders & is not affected by most common solvents and chemicals	IES-RP-CC004.2

Extractables	Value	Procedure
Particles (>0.5μm)	17.0 x 10 ⁶ /m ²	IES-RP-CC004.2
Fibres (>100μm)	6,400 fibres/m ²	IES-RP-CC004.2
Non Volatile Residues Deionised Water Isopropyl Alcohol	0.02g/m² 0.05g/m²	IES-RP-CC004.2
Extractable lons in DI Water Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	<8ppm <16ppm <4ppm <8ppm	IES-RP-CC004.2

Packaging	Cleanroom packed. Double bagged in resealable pouches of 15 wipes, 20 packs per case.
Sterility	Gamma irradiated with not less than 25kGy

Data relates to the pre-impregnated dry wipe only.

Please refer to relevant Klercide Technical File for details of the impregnate.

Klerwipe-CR Impregnated Pouch Wipes Technical Specification

Product Codes

WPK923, WPK925, WPK2500, WPK3500, WPK2505, WPK3505 WPK2515, WPK2525, WPK2535, WPK2545, WPK2551, WPK2570

Physical Properties	Value	Procedure
Material Composition	Hydroentangled non woven 55% polyester-45% ce	llulose blend
Colour	White	
Basic Weight	68g/m²	164/5061
Dry Tensile Machine Direction Dry Tensile Cross Direction (CD) Wet Machine Direction (MD) Wet Cross Direction (CD) Elmendorf Tear (MD) Dry elongation (MD) Dry elongation (CD)	4000N/m 950N/m 3040N/m 730N/m 4040mN 20% 90%	164/5321 164/5321 164/5325 164/5325 164/5290 164/5321 164/5321
Absorbency Intrinsic Extrinsic Rate	5.0ml/g 340ml/m² 6 secs	IES-RP-CC004.2
Chemical Compatibility	Contains no chemical binders & is not affected by most common solvents and chemicals	IES-RP-CC004.2

Extractables	Value	Procedure
Particles (>0.5μm)	92 x 10 ⁶ /m ²	IES-RP-CC004.2
Fibres (>100μm)	1.12 x 10 ⁶ /m ²	IES-RP-CC004.2
Non Volatile Residues Deionised Water Isopropyl Alcohol	0.09g/m² 0.046g/m²	IES-RP-CC004.2
Extractable Ions in DI Water Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	33ppm 3ppm 290ppm 88ppm	IES-RP-CC004.2

Packaging	Cleanroom packed. Double bagged in resealable pouches of 15 wipes, 20 packs per case.
Sterility	Gamma irradiated with not less than 25kGy or aseptically filled.

Data relates to the pre-impregnated dry wipes only.

Please refer to relevant Klercide Technical File for details of the impregnate.

Klerwipe[™] Sterile Mop Wipes Technical Specification

Product Codes WPM5000, WPM5005, WPM5015, WPM5025, WPM5035, WPM5045, WPM5051

Physical Properties	Value	Procedure
Material Composition	Hydroentangled non woven 55% polyester-45% ce	llulose blend
Colour	White	
Basic Weight	68g/m²	164/5061
Dry Tensile Machine Direction Dry Tensile Cross Direction (CD) Wet Machine Direction (MD) Wet Cross Direction (CD) Elmendorf Tear (MD) Dry elongation (MD) Dry elongation (CD)	4000N/m 950N/m 3040N/m 730N/m 4040mN 20% 90%	164/5321 164/5321 164/5325 164/5325 164/5321 164/5321
Absorbency Intrinsic Extrinsic Rate	5.0ml/g 340ml/m² 6 secs	IES-RP-CC004.2
Chemical Compatibility	Contains no chemical binders & is not affected by most common solvents and chemicals	IES-RP-CC004.2

Extractables	Value	Procedure
Particles (>0.5um)	92 x 10 ⁶ /m ²	IES-RP-CC004.2
Fibres (>100um)	1.12 x 10 ⁶ /m ²	IES-RP-CC004.2
Non Volatile Residues Deionised Water Isopropyl Alcohol	0.09g/m² 0.046g/m²	IES-RP-CC004.2
Extractable Ions in DI Water Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	33ppm 3ppm 290ppm 88ppm	IES-RP-CC004.2

Packaging	Cleanroom packed. Double bagged in a foil pack of 20 wipes. 10 packs per case.
Sterility	Gamma irradiated with not less than 25kGy or aseptically filled.

Data relates to the pre-impregnated dry wipes only.

Please refer to relevant Klercide Technical File for details of the impregnate.

Klerwipe[™] 70/30 Sterile 70% Alcohol Impregnated Low Particulate Tub Wipe, 42gsm Technical Specification

Product Codes WPK4105, WPK4100

Physical Properties	Value
Material Composition	Non woven cellulose / polyester blend
Colour	White
Basic Weight	42g/m ²
Dry Tensile Machine Direction Dry Cross Direction (CD) Wet Machine Direction (MD) Wet Cross Direction (CD) Elmendorf Tear (MD) Dry elongation (MD) Dry elongation (CD)	2500N/m 500N/m 2170N/m 400N/m 3500mN 20% 120%
Absorption Capacity	400%
Chemical Compatibility	Contains no additives and is not affected by most common solvents and chemicals
Packaging	Cleanroom packed - Double bagged 100 wipes per tub - 15 tubs per case
Sterility	Gamma irradiated at not less than 25kGy

Data relates to the pre-impregnated dry wipes only.

Please refer to the relevant Klercide Technical file for details of the impregnate.

Klerwipe[™] 70/30 Sterile 70% Alcohol Impregnated Low Particulate Tub Wipe, 22gsm Technical Specification

Product Codes WPK3905, WPK3900

Physical Properties	Value
Material Composition	Non woven cellulose / polyester blend
Colour	White
Basic Weight	22g/m²
Dry Tensile Machine Direction Dry Cross Direction (CD) Wet Machine Direction (MD) Wet Cross Direction (CD)	625N/m 295N/m 325N/m 145N/m
Absorption Time	5.7 sec.
Absorption Capacity	5.8
Chemical Compatibility	Contains an acrylic polymer system but is not affected by most common solvents and chemicals
Packaging	Cleanroom packed - Double bagged 200 wipes per tub - 15 tubs per case
Sterility	Gamma irradiated at not less than 25kGy

Data relates to the pre-impregnated dry wipes only.

Please refer to the relevant Klercide Technical file for details of the impregnate.

Klerwipe Laser[™] Sterile 100% Polyester Dry Wipe Technical Specification

Product Codes WPL2020 Klerwipe Laser Sterile 100% Polyester Dry Wipe

Physical Properties	Value	Procedure
Material Composition	100% continuous filament polyester fibre with lase	er sealed edges
Colour	White	
Basic Weight	115g/m²	
Extension to break (MD) Extension to break (CD)	120% 160%	
Absorbency Intrinsic Extrinsic Rate	3.04ml/g 320ml/m² <2secs	IES-RP-CC004.2
Chemical Compatibility	Contains no chemical binders & is not affected by most common solvents and chemicals	IES-RP-CC004.2

Extractables	Value	Procedure
Particles (>0.5μm)	17.0 x 10 ⁶ /m ²	IES-RP-CC004.2
Fibres (>100μm)	6,400 fibres/m ²	IES-RP-CC004.2
Non Volatile Residues Deionised Water Isopropyl Alcohol	0.02g/m² 0.05g/m²	IES-RP-CC004.2
Extractable lons in DI Water Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	<8ppm <16ppm <4ppm <8ppm	IES-RP-CC004.2

Packaging	Cleanroom antistatic packed. Double bagged in packs of 10, 10 packs per case.
Sterility	Gamma irradiated with not less than 25kGy

Klerwipe Laser[™] Sterile Black Polyester Dry Wipe Technical Specification

Product Codes WPLB2020 Klerwipe Laser Sterile Black Polyester Dry Wipe

Physical Properties	Value	Procedure
Material Composition	100% continuous filament polyester fibre with las	er sealed edges
Colour	Black	
Basic Weight	130g/m²	
Absorbency Extrinsic Rate	482ml/m ² 0.2secs	IES-RP-CC004.2
Chemical Compatibility	Contains no chemical binders & is not affected by most common solvents and chemicals	

Extractables	Value	Procedure
Particles (>0.5μm)	$12.7 \times 10^6/m^2$	IES-RP-CC004.2
Biaxial Shake Test		
Particles (>5.0μm)	$0.15 \times 10^6/m^2$	IES-RP-CC004.2
Biaxial Shake Test		
Non Volatile Residues Deionised Water Isopropyl Alcohol Acetone	0.0020g/m ² 0.0335g/m ² 0.0900g/m ²	IES-RP-CC004.2
Specific Ion Content Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	<100ppb <100ppb <100ppb <100ppb	IES-RP-CC004.2

Packaging	Cleanroom packed. Double bagged in packs of 10, 10 packs per case.
Sterility	Gamma irradiated with not less than 25kGy

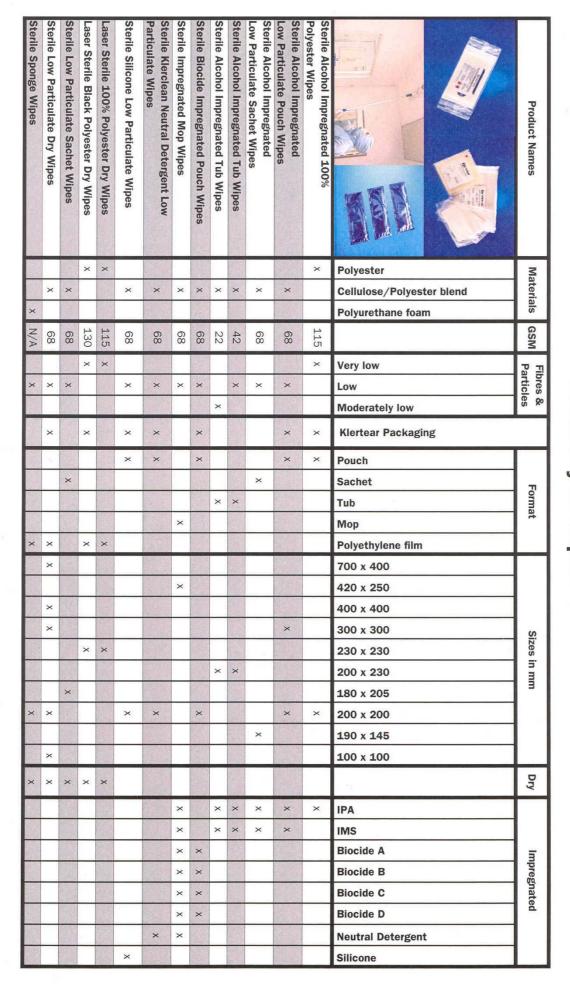
Klerwipe[™] Sterile Low Particulate Dry Wipe Technical Specification

Product Codes WPK950, WPK1022, WPK1026, WPK5026, WPK1028, WPK5028, WPK1030, WPK1070

Physical Properties	Value	Procedure			
Material Composition	Hydroentangled non woven 55% polyester-45% cellulose blend				
Colour	White				
Basic Weight	68g/m²	164/5061			
Dry Tensile Machine Direction Dry Cross Direction (CD) Wet Machine Direction (MD) Wet Cross Direction (CD) Elmendorf Tear (MD) Dry elongation (MD) Dry elongation (CD)	4000N/m 950N/m 3040N/m 730N/m 4040mN 20% 90%	164/5321 164/5321 164/5325 164/5325 164/5290 164/5321 164/5321			
Absorbency Intrinsic Extrinsic Rate	5.0ml/g 340ml/m² 6 secs	IES-RP-CC004.2			
Chemical Compatibility	Contains no chemical binders and is not affected by most common solvents & chemicals	IES-RP-CC004.2			

Extractables	Value	Procedure
Particles (>0.5μm)	92 x 10 ⁶ /m ²	IES-RP-CC004.2
Fibres (>100μm)	1.12 x 10 ⁶ /m ²	IES-RP-CC004.2
Non Volatile Residues Deionised Water Isopropyl Alcohol	0.09g/m² 0.046g/m²	IES-RP-CC004.2
Extractable Ions in DI Water Sodium (Na ⁺) Potassium (K ⁺) Calcium (Ca ⁺) Magnesium (Mg ⁺)	33ppm 3ppm 290ppm 88ppm	IES-RP-CC004.2

Packaging	Cleanroom antistatic packed. Double bagged in packs of 10 wipes 10 packs per case
Sterility	Gamma irradiated with not less than 25kGy





Suitability of wipe materials for use in life science cleanrooms

Material	Low Particulate	Absorbency	Resistance to tearing	Biofilm Removal	Impreg- nated	Cost	Suitable for	
							Critical Areas	Floors, walls, ceilings
100% Polyester	Excellent	Good	Excellent	Fair	Yes	High	Yes	No
Hydroentangled poly/cellulose	Good	Excellent	Good	Excellent	Yes	Medium	Yes	Yes
PU Foam	Excellent	Excellent	Fair	Good	No	Medium	Yes	Yes
Cellulose	Poor	Good	Poor	Fair	Yes	Low	No	No

