

DUPONT™ SONTARA® MICROPURE



Increasing productivity in cleanroom manufacturing is a challenge. This is especially true when it comes to reducing potential contamination that can cause product defects and associated yield losses. Therefore, choosing an appropriate wipe is critical to product quality and not putting your image at risk.

The choice of the appropriate wipe for a specific cleaning task can depend on various aspects, such as:

- What is the cleanroom environment like?
- What tasks/movements are carried/required as part of the cleaning method/process?
- What is the purpose of the cleaning – spill clean up, machinery, utensil or surface cleaning?
- What substances are to be removed during cleaning – particles and/or liquids?
- Are cleaning agents used?
- What are the objects to be cleaned like – smooth, abrasive surface, etc. ?
- etc.



Iso 14644		ISO-3	ISO-4	ISO-5	ISO-6	ISO-7	ISO-8	ISO-9	Dimensions (mm)	Wipes per package
US Fed. Std. 209		1	10	100	1 000	10 000	100 000			
GMP – European Guidelines					A/B		C	D		
Sontara® MicroPure 100	The wipe for critical applications								224x224	300
									305x305	150
									457x457	75
Sontara® MicroPure AP	The all purpose wipe								224x224	300
									305x305	150
Sontara® MicroPure SV	The wipe for less demanding applications								224x224	500
									305x305	250
									457x457	75
Sontara® MicroPure MOP	The wipe for floor cleaning								300x500	500
									500x500	500
									400x700	500
									200x400	500

Requirements for wiping and cleaning levels may vary. Choosing the appropriate wipe depends on many factors, such as for example: the surface to be cleaned (smooth or rough, edges or without edges, etc.), the required level of cleanliness, procedures employed and others.

☑ **The first choice for many endusers**

Sontara® MicroPure nonwoven styles (woodpulp/polyester) are engineered for cleanroom use and combine absorbency of a natural fibre with the cleanliness and strength of a synthetic fibre in the same fabric. No binders or chemical treatments are used to manufacture them.

☑ **Helps you to keep your cleanroom clean**

Sontara® Micropure is a woodpulp/polyester nonwoven fabric. Made by DuPont hydroentangling technology, using jets of filtered, high-pressure water, Sontara® fabric is continually “washed” during manufacture. Ideally for cleanroom use since it doesn’t contain binders or require chemical treatment. The high cleanliness and purity are ensured by low extractable level and ion content as well as extremely low particle generation by the material itself.

☑ **Offers you absorbency and cleanliness in a single fabric**

The fabric styles offer high particle and liquid absorbency due to their cellulose content. Unlike many other nonwoven fabrics, Sontara® MicroPure fabrics do offer an ideal combination of cleanliness, absorbency and purity in a single fabric without binders, chemicals or adhesives. Many nonwoven wipe fabrics include binders or additives or are chemically treated on the surface to reduce the particle debris. However, these additives very often reduce absorbency – an important functional property – and, in addition, can cause contamination from the wipes.

☑ **Quality you can rely on**

- Quality control from the manufacturing of the fabric to the cutting and packaging of the final wipe.
- Advanced packaging design eliminates the need to cut or tear the bag in the cleanroom
- Product traceability.

Fabric technical data

Property		Sontara® MicroPure 100	Sontara® MicroPure AP	Unit	Test method
Composition	Polyester	53.5	45	%	
	Woodpulp	46.5	55	%	
Basis weight		56	68	g/m ²	ERT 40.3-90*/ASTM D3776**
Intrinsic absorption capacity		4.0	4.27	ml/g	INDA IST 10.2-98
Extrinsic absorption capacity		333	290	ml/m ²	
Intrinsic absorption rate		24.4	34.0	ml/g/s	INDA IST 10.2-95
Extrinsic absorption rate		2830	2300	ml/m ² /s	
Grab tensile breaking strength	MD	124	156	N	ASTM D5034
	XD	61	89	N	
Elongation	MD	27.5	24	%	ASTM D5034
	XD	116.5	75	%	
Particles > 0.5 µm	Wet	61.1	80	10 ⁶ ; Part.m ²	Biaxial Shake IES RP CC 004.2 sec. 5.1
	Wet	7	12	10 ⁶ ; Part.m ²	Near-zero mechanical stress IES RP CC 004.2 sec. 5.1
	Dry		45	10 ³ ; Part.m ³	Gelbo (5 min) INDA IST 160.1-92
Extractables in H ₂ O		0.04	0.01	%	IES RP CC 004.2 sec. 6.1
Ions	Sodium	9.6	9.6	ppm	IES RP CC 004.2 sec. 6.2
	Iron	<2.3	2.4	ppm	
	Magnesium	21.8	69	ppm	
	Potassium	<1.4	9.0	ppm	
	Calcium	196	330	ppm	

* Sontara® Micropure 100.

** Sontara® Micropure AP.