



## **Product Description**

Ultra clean Low Density Polythene bags for use in clean environments. Produced entirely in a Class 1000 (ISO Class 5) Cleanroom and supplied double bagged with a certificate of conformance. All bags are heat sealable.

100µm thickness. Available as standard in 3 sizes.

Supplied in packs of 100.

### **SIZES AVAILABLE:**

- Small (215mm x 150mm x 100µm)
- Medium (300mm x 215mm x 100µm)
- Large (425mm x 300mm x 100µm)
  
- Bespoke Sizes Are Also Available

See Data over page for product properties, test methods and test results:



# PRODUCT DATA SHEET

# LDPE Ultra Clean Cleanroom Bag

## LDPE Cleanroom Bag Test Data

Property Measured	Method Used	Units of Measurement	Typical Value					
<b>Granule Properties</b>								
Melt Index	ASTM D 1238	g / 10 min	0.75					
Density	ASTM D2839 / D1505	g / cm <sup>3</sup>	0.923					
Crystallization Point	ASTM D3418	°C	96					
Peak Melting Temperature	ASTM D3418	°C	109					
Slip / Antiblock Additive			None					
Antistatic Additive			None					
<b>Film Properties</b>								
Film Thickness		µm	60 – 300 (+/- 10% Avg)					
Tensile strength at Break*	ASTM D882	MPa	MD: 24 TD: 23					
Elongation at Break*	ASTM D882	%	MD: 370% TD: 570%					
Elmendorf Tear Strength*	ASTM D1922	g/µm	MD:4 TD: 4					
Puncture Resistance**	FTMS 101C 2065 - 1	N	43.4					
1% Secant Modulus*	ASTM D882	MPa	MD: 220 TD: 260					
Haze	ASTM D1003	%	7					
Gloss,60° angle	ASTM D2457	%	9					
MVTR	DIN 54122-2-D	g/m <sup>2</sup> /24 hrs / bar at 90% RH and 38° C	2.77					
OTR	DIN 53380-3	cm <sup>3</sup> / m <sup>2</sup> /day/bar	1059					
<b>Cleanliness Properties</b>								
Particulates	Liquid Particle Count		Particle size	> 0,30 µm	<20.0 per cm <sup>2</sup>			
			> 0,50 µm	<10.0 per cm <sup>2</sup>				
			> 1,00 µm	<3.0 per cm <sup>2</sup>				
Ion Chromatography	<b>Anions</b>	F <sup>-</sup>	Cl <sup>-</sup>	Br <sup>-</sup>	NO <sub>3</sub> <sup>-</sup>	NO <sub>2</sub> <sup>-</sup>	SO <sub>4</sub> <sup>2-</sup>	PO <sub>4</sub> <sup>3-</sup>
	Found	<0.020	<0.017	<0.057	<0.014	<0.020	<0.084	<0.096
	LLD	0.020	0.017	0.057	0.014	0.020	0.084	0.096
	<b>Cations</b>	Li <sup>+</sup>	Na <sup>+</sup>	NH <sub>4</sub> <sup>+</sup>	K <sup>+</sup>	Mg <sup>2+</sup>	Ca <sup>2+</sup>	
	Found	<0.014	<0.015	<0.121	<0.021	<0.057	<0.034	
LLD	0.014	0.015	0.121	0.021	0.057	0.034		
VOC (Outgassing)	Measures given in ng/cm <sup>2</sup>						LLD = Low Limit Detection	
	Global contamination as toluene equivalent						µg/g	<20
Surface Cleanliness	(Mil – STD 1246C) Level 25							
* Film properties measured on 50-micron film with a blow up ratio of 2.5 ** Film properties measured on 150 - micron film with a blow up ratio of 2.5								
All cleanliness properties measured on 150 – micron film with a blow up ratio of 2.5								

