



Melinex®

Polyester Films

Melinex® FS1

Product Description

Melinex® FS1 is a sparkling optically clear knurled film with an antistatic coating on the inside surface providing a limited level of anti-fog performance and an adhesion promoting pretreatment on the outside.

Typical Applications

Melinex® FS1 can be used for disposable medical faceshields and visors where its excellent clarity and anti-fog properties are utilised. Melinex® FS1 is available in thicknesses of 125, 175 and 250 micron.

General Information

Melinex® FS1 can withstand a broad range of temperatures and has good resistance to moisture and most chemicals. As per Article 3(3) of the REACH regulation (EC) No 1907/2006 Melinex® FS1 film is classified as an article. There are no substances intended to be released from the above film under normal, reasonably foreseeable conditions of use, as defined by Article 7(1).

Food Contact Advice

Melinex® FS1 has not been assessed against Food Contact Legislation

Film Properties

Property	Unit	Typical Values			Test Method
		125	175	250	
General					
Thickness	micron	125	175	250	DTF Method
Area Yield	m ² /kg	5.7	4.0	2.9	DTF Method
Relative Density		1.4	1.4	1.4	Based on ASTM D1505-79
Electrical					
Surface Resistivity	log ohms / square	10	10	10	DTF Method
Mechanical					
Tensile Strength at Break - MD	kgf/mm ²	17.5	17.5	17.5	Based on ASTM D882-83
Tensile Strength at Break - TD	kgf/mm ²	17.5	17.5	17.5	Based on ASTM D882-83
F5 (force to elongate 5% of gauge range) - MD	kgf/mm ²	10	10	10	Based on ASTM D882-83
F5 (force to elongate 5% of gauge range) - TD	kgf/mm ²	10	10	10	Based on ASTM D882-83
Optical					
Haze	%	1.0	1.0	1.5	Based on ASTM D1003-77
Total Luminous Transmission (TLT)	%	89	89	88	Based on ASTM D1003-77
Thermal					
Upper Melt Temperature	C	255-260	255-260	255-260	Based on ASTM E794-85
Coefficient of Thermal Expansion (between 20 to 50C)	ppm/K	19	19	19	Based on ASTM E831-06
Shrinkage (after 5 mins at 150C) - MD	%	1.2	1.2	1.2	Based on ASTM D1204-78
Shrinkage (after 5 mins at 150C) - TD	%	0.5	0.5	0.5	Based on ASTM D1204-78

Disposal Advice

Disposal of Melinex® FS1 does not present special disposal problems. Where waste occurs in a clean, uncontaminated form it can be recycled. In most circumstances, once Melinex® FS1 has been laminated, coated, printed or metallised, incineration with Energy Recovery is the most environmentally efficient recovery route. Melinex® FS1 can also be burned in an incinerator with normal refuse or can be buried as a relatively inert material in a landfill. The disposal method should comply with appropriate local and country regulations.

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Caution: Do not use in medical applications involving permanent implantation in the human body. For other medical applications, see "DuPont Teijin Films Medical Caution Statement", H-50102-3-DTF and H-50103-3-DTF.

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