## Honeywell Aclar® UltRx 4000

Effective Date: 12/05/08 Revised Date: 07/15/10

Aclar® UltRx 4000 film is a 4.00 mil (102 micron) PCTFE homopolymer, high performance barrier film for the pharmaceutical and medical markets. It thermoforms well on conventional blister packaging equipment and provides the highest barrier of any clear film.

Properties of 4.00 mil (102μ) film at 73°F- 50% RH		Typical Value		Took Mathad
		English	Metric	Test Method
Specific Gravity		2.11		ASTM D1505
Yield		3,285 in <sup>2</sup> /lb.	4.67 m²/kg	
Haze		< 1 %		ASTM D1003
Crystalline Melting Point		412°F	211°C	ASTM D4591
Dimensional Stability (10 mins. @ 300°F/149°C)	-MD - TD	≤ + 5 % < - 5 %		ASTM D1204
Tensile Strength	- MD - TD	6,000 – 9,000 psi 4,000 – 7,000 psi	41 - 62 MPa 28 - 48 MPa	ASTM D882
Elongation	- MD - TD	150 - 225 % 175 - 225 %		ASTM D882
Modulus, secant	- MD - TD	160,000 - 200,000 psi 160,000 - 200,000 psi	1103 - 1379 MPa 1103 - 1379 MPa	ASTM D882
Surface Tension (treated side)		≥ 42 dynes/cm		ASTM D2578
Water Vapor Transmission Rate @ 77°F (25°C) / 60% RH @ 86°F (30°C) / 60% RH @ 86°F (30°C) / 65% RH @ 104°F (40°C) / 75% RH @ 100°F (37.8°C) /100% RH		gms/100in²/day 0.0006 0.0010 0.0009 0.0031 0.0042	gms/m²/day 0.009 0.016 0.015 0.048 0.065	ASTM F1249

Aclar® is manufactured in accordance with industry accepted standards for cGMP. It complies with the following regulations and requirements: FDA 21 CFR 177.1380, USP Class VI Plastics, and EU Directive 2002/72/EC. Drug Master File #1578 has been established with the FDA for Aclar® Films. Please contact your Honeywell representative for additional information and detailed compliance statements.

## Honeywell

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