



# MONOLYN

## MQ21

### Technical Data Sheet

*M & Q Packaging*  
*1 Earl Street*  
*PO Box 180*  
*Schuylkill Haven, PA 17972*

#### Product Description

Monolyn MQ21 is a transparent packaging film for use in the food, medical, and industrial markets.

- \* Food applications: MQ21 provides oil and grease resistance and is an odor barrier without flavor scalping.
- \* Medical applications: MQ21 is uniquely suited for use in sterilization processes.
- \* Industrial applications: MQ21 provides chemical and thermal resistance.

Monolyn MQ21 is currently available in the following (mil) thicknesses: .80, .90, 1.0, 1.30, 1.60, 2.0, and 3.0. Other thicknesses are available upon request.

Properties	Values	Test Method
<i>General:</i> Tested at 1 mil thickness Area Yield (sq. in./lb) Haze, % Gloss, 20 Degree	1.00 24,516 8.6 – 10.0 72.5 – 74.1	ASTM D1003 ASTM D2457
<i>Mechanical:</i> Tensile Strength (psi) Elongation, %	17,200 – 20,600 320 - 380	ASTM D882 ASTM D882
Tear, Graves (grams/mil)	500 - 600	ASTM D1004
Puncture Strength (grams)	520 - 620	ASTM F1306 (1.2mm dia. probe @ 1 in/min)
<i>Coefficient of Friction:</i> Film-Film, Side A-B Kinetic Film-Metal Kinetic	.45 .35	ASTM D1894
<i>Permeability:</i> Oxygen Transmission Rate 1 mil 0 % R.H., 73 deg F 50% R.H., 73 deg F 90% R.H., 73 deg F  Oxygen Transmission Rate 3 mil 100% R.H., 73 deg F  Water Vapor Transmission Rate 90% R.H., 100 deg F	2.60 1.85 6.35  1.38  36.5	ASTM D3985 ASTM F1927 ASTM F1927  ASTM F1927 (grams/100 <sup>2</sup> in. /day)  ASTM F1249

#### FDA Statement

Monolyn MQ21 is manufactured from resins that meet all the requirements of the Food and Drug Administration regulation 21 CFR 177.1500 (a) (6), (b) (6.1) to produce articles intended for use in the processing, handling, and packaging of food products.

*Notice: The values presented in this data sheet are typical values based on the thickness of the film and should not to be interpreted as product specifications. The statements, information and data given are believed to be accurate and reliable, but are presented without guarantee, warranty or responsibility of any kind, expressed or implied. Since the actual conditions of use and the specific uses of our products are beyond our control, all risks of such use are assumed by the user. The use of this product should be tested fully by the user in the specific application to determine fitness for use.*