

## Metallyte™ 18MM480

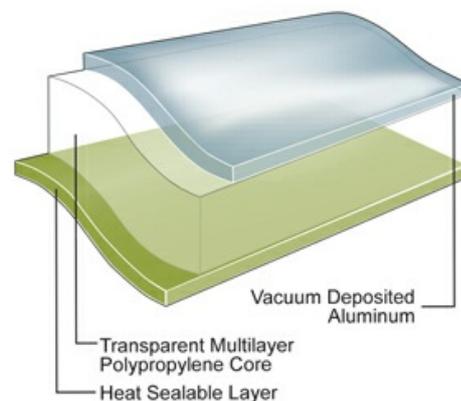
### Oriented Polypropylene Film

#### Product Description

Metallyte 18MM480 is a biaxially oriented polypropylene film, metallized on one side, heat sealable and slip controlled on the other side. It is typically used in lamination with other substrates on HFFS and VFFS applications. When laminated with standard coex, it can be lap sealed. Film is available in roll widths up to maximum 850 mm.

#### Key Features

- Excellent adhesion of aluminum to film
- Good moisture barrier and light barrier
- Slip controlled sealing layer
- Good hot tack
- High yield
- Easy to convert
- Broad seal range for good performance on VFFS and HFFS machines
- Brilliant metal appearance



#### General

##### Availability

- ✓ Africa & Middle East
- ✓ Asia Pacific
- ✓ Europe

##### Features

- ✓ In Lamination Lap Sealable
- ✓ Moisture Barrier
- ✓ Light Barrier

##### Applications

- ✓ Biscuits/Cookie/Crackers
- ✓ Box Overwrap
- ✓ Confectionery, Gum
- ✓ Confectionery, Sugar
- ✓ Bakery
- ✓ Confectionery, Chocolate
- ✓ Frozen Food
- ✓ Crisps and Snacks
- ✓ Pet Food
- ✓ Ice Cream

##### Uses

- ✓ HFFS Flexible Packaging
- ✓ Pre-made Bags - Flexible Packaging
- ✓ VFFS Flexible Packaging

##### Appearance

##### Processing Method

- ✓ Inner Web Adhesive Lamination
- ✓ Solvent Flexographic Printing
- ✓ Solvent Rotogravure Printing
- ✓ Surface Print Unsupported
- ✓ Cold Foil Stamping

##### Revision date

- ✓ January 03, 2014

## Properties

Property	Typical Value	Unit	Test Based On
Yield	61.1	m <sup>2</sup> /kg	Internal Method
Unit Weight	16.4	g/m <sup>2</sup>	Internal Method
Film Thickness	18	μ	Internal Method
Optical Density	2.1		Internal Method
Tensile Strength at Break <i>200 mm/min pull rate, 120 mm jaw separation</i>			
MD	150	Mpa	Internal Method
TD	290	Mpa	Internal Method
Dimensional Stability 135°C / 275°F, 7 min			
MD	-6.5	%	Internal Method
TD	-4.5	%	Internal Method
Elongation at Break			
MD	175	%	Internal Method
TD	60	%	Internal Method
Elastic Modulus			
MD	2000	Mpa	Internal Method
TD	3600	Mpa	Internal Method
Seal Strength (Otto Brügger)			
140°C, 0.3 Mpa, 2 sec	450	g/2.5 cm	Internal Method
Heat Seal Range			
0.250 Mpa, 0.2 sec	40	°C	Internal Method
Coefficient of Friction			
Unmetallized Side	0.40		Internal Method
Water Vapor Transmission Rate			
38°C, 90% RH	0.80	g/m <sup>2</sup> /24 hr	Internal Method
Oxygen Transmission Rate			
23°C, 0% RH	100	cm <sup>3</sup> /m <sup>2</sup> /24 hr	Internal Method
Oxygen Transmission Rate (Wet)			
23°C, 75% RH	100	cm <sup>3</sup> /m <sup>2</sup> /24 hr	Internal Method

## Legal Statement

Contact your Jindal Films Customer Service Representative for potential food contact application compliance (e.g.FDA,EU,HPFB). This product is not intended for use in medical applications and should not be used in any such applications.

## Processing Statement

- Standard reel winding: Metallized side outside

## Footnotes

1. Product may not be available in one or more countries in the identified Availability regions. Please contact your Sales Representative for complete country availability.
2. Tested at 38°C (100°F)/100%RH, then calculated to 90%RH with .90 multiplier.
3. Sample dimensions and conditioning vary due to differences in equipment design.

Typical properties: these are not to be construed as specifications.

© 2013 Jindal Films. Jindal Films, the Jindal Films logo, and other product or service names used herein are trademarks of Jindal Films, unless indicated otherwise. This document may not be distributed, displayed, copied or altered without Jindal Films' prior written authorization. To the extent Jindal Films authorizes distributing, displaying and/or copying of this document, the user may do so only if the document is unaltered and complete, including all of its headers, footers, disclaimers and other information. You may not copy this document to, or reproduce it in whole or in part on, a website. Jindal Films does not guarantee the typical (or other) values. Any data included herein is based upon analysis of representative samples and not the actual product shipped. The information in this document relates only to the named product or materials when not in combination with any other product or materials. We based the information on data believed to be reliable on the date compiled, but we do not represent, warrant, or otherwise guarantee the accuracy, reliability, or completeness of this information; nor do we warrant, expressly or impliedly, the merchantability, fitness for a particular purpose, freedom from patent infringement, or suitability of the products, materials or processes described. The user is solely responsible for all determinations regarding any use of material or product and any process in its territories of interest. We expressly disclaim liability for any loss, damage or injury directly or indirectly suffered or incurred as a result of, or

related to, anyone using or relying on any of the information in this document. This document is not an endorsement of any non-Jindal Films' product or process, and we expressly disclaim any contrary implication. The terms "we," "our," "Jindal Films" and "Jindal" are each used for convenience, and may include Films Americas LLC, Jindal Films Americas LLC, Films Europe S.A.R.L. or any companies affiliated with them in the production and sale of film products. There are a number of such affiliated companies, many with names including "Jindal" or "Film". Neither the use of these terms of convenience, nor anything else in this document, is intended to override or supersede the legal separateness of those affiliated companies and responsibility for local action and accountability remains with them.