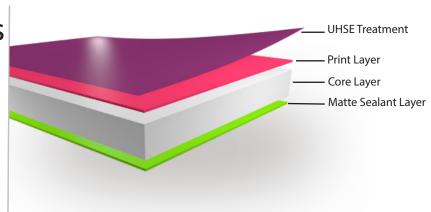
# TORAYFAN® FMS3

# **Applications**

- Confections
- Snacks
- Bakery
- · Pet Food
- Ag/Chem
- Medical



# ONE SIDE UHSE TREATED, ONE SIDE HEAT SEALABLE MATTE BOPP FILM

## **Summary**

Bi-Axially Oriented Polypropylene film with one side treated with Toray's Ultra High Surface Energy (UHSE) treatment, one side heat sealable with uniform matte finish. Designed to be used as an outer web for food packaging, or in graphic applications where the matte surface reduces glare for easy viewing.

Toravfan FMS



#### Technical Data \*

PROPERTIES		METHOD	UNITS	TYPICAL VALUES		
Thickness		-	micron	18	25	31
Nominal Yield		-	m²/kg	63	43	35
Tensile Strength at Break -	MD	- ASTM D882	MPa -	148	148	148
	TD			314	314	314
Young's Modulus -	MD	- ASTM D882	MPa -	2,180	2,180	2,180
	TD			3,780	3,780	3,780
Elongation at Break	MD	- ASTM D882	% -	200	200	200
	TD			60	60	60
Heat Shrinkage (140°C for 15 minutes)	MD	- ASTM D1204	% -	9.5	8	8
	TD			5	5	5
Coefficient of Friction (Sealant Side)		ASTM D1894 -	$\mu_{s}$	0.58	0.58	0.58
			$\mu_{\sf d}$	0.36	0.36	0.36
Gloss (60°)		ASTM D2457	GU	17	17	17
Haze (1 sheet)		ASTM 1003	%	50	50	50
Wetting Tension		ASTM D2578	dyne/cm	42	42	42
Heat Seal Strength @ 121°C		1	g/25mm	310	310	310
Seal Initiation Temp (>200g/25mm)		1	°C	113	113	113
MVTR - 38°C, 90% RH		ASTM F1249	g/m²/day	7.8	4.8	4.8

<sup>1</sup> Sentinel Sealer model 12 ASL, 0.5 sec, 20 psi. UPPER: flat, Teflon™ coated. LOWER: rubber with glass cloth, unheated

### The product described is covered by one or more of the following patents or patents pending: US 8431234.

#### Key Features

- Low gloss, matte sealant layer with glossy backside
- Low glare
- Good bond in adhesive and extrusion laminations
- Good ink adhesion with water based and solvent based inks
- Good print quality in Roto Gravure and Flexo printing

#### Similar Products

- F61W
- F62W
- F63W
- F64W

#### Typical Structures

- FMS3/ink/PE or ADH/PWX4
- FMS3/ink/PE or ADH/PCFS
- FMS3/ink/PE or ADH/PC1/PE
- FMS3/ADH/Board

#### Winding Direction



#### ★ These values do not constitute specific binding specifications

DISCLAIMER: This information is believed to be correct as of the date of issue. Toray Plastics (America), Inc. MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE AND TAKES NO RESPONSIBILITY REGARDING THE SUITABILITY OF THIS INFORMATION FOR THE USER'S INTENDED PURPOSES OR FOR THE CONSEQUENCE OF ITS USE. User is responsible for determining whether the Toray Plastics (America), Inc. product is fit for a particular purpose and suitable for user's method or use of application. Given the variety of factors that can affect the use and application of Toray Plastics (America), Inc. products, which are uniquely within the user's knowledge and control, it is essential that the user make its own tests to determine the safety and suitability of each Toray Plastics (America), Inc. product or product combination for its own purpose.

Torayfan® is a registered trademark of Toray Industries, Inc. for its range of bi-oriented Polypropylene Films (BOPP)