

A-pet Specification Sheet

Typical Properties Food Grade A-pet (Amorphous Polyethylene Terephthalate)

<u>Grade</u>	Thermoforming
<u>Thickness Range</u>	.175mm minimum 1.2mm maximum
<u>Roll Width range</u>	Minimum 250mm Maximum 1300mm
<u>Gauge Tolerance</u>	+7% .175mm - .30mm +5% .30mm - 1.2mm
<u>Width Tolerance</u>	+/-1mm
<u>Grades available</u>	Silicon coated Anti-block 2% Anti-static Printing & cutting High Impact
<u>Minimum Order Quantities</u>	Clear – 1 tonne per size Other – 7 tonne
<u>Melting Point</u>	250c
<u>Elongation at Yield</u>	>300 % JIS K-6734
<u>Optical Properties</u>	
	Tt 91.72 %
	Tp 91.46 %
	Haze 0.28 %
<u>Shrinkage Ratio</u>	0.8 – 1.2 %
<u>Thermoforming Temperature</u>	120 – 130 c

Barrier Properties

N2	1.5 cc/m. day
O2	2.8
CO2	18
H2O	1.3 – 1.5

Air / Gas Permeability	<u>O2</u> 28	<u>CO2</u> 120	<u>SO2</u> 6.0
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Liquid Permeability	<u>H2O</u> 3.0	<u>C1H2OH</u> <2.0
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GV % > 145% @ 60d. ASTM D-523

TV % >95 ASTM D-1003

HV % >3.0 ASTM D-1003

<u>Item</u>	<u>Unit</u>	<u>Test Method</u>	<u>High I.V.</u>	<u>Low I.V.</u>
Specific Gravity	-	ASTM D-792	1.34	1.34
Intrinsic Viscosity	dl/g		0.72	0.60
Shrinkage	%	150c / 5 min	-1 ~ -4	-1 ~ -4
Dyne Level		ASTM D-2578	34-36	
Dynamic Friction Coefficient	-	ASTM D-1894	<0.5	<0.5
Crystallisation (Half time)	sec	Test at 140c	>60 sec	>20 sec
Tensile Strength of yield	kg /cm ³	JIS K-6734	>450	>450
Tensile Strength Of Break	kg /cm ³	JIS K-6734	>600	>600
Elongation	%	JIS K-6734	>300	>300
Transparency	%	ASTM D-1003	90^	

Haze	ASTM D-1003	<3.0	
Glass transition Temperature	deg. C Tested by DSC	72	69
Crystallisation Temperature	deg. C Tested by DSC	126	128
GV	% ASTM D-523 @ 60d	>145	>145
TV	% ASTM D-1003	>95	>95
HV	% ASTM D-1003	>3.0	>3.0
Trace amounts Of materials	Nil		
Volatiles	Nil		

Declaration

The A-pet film (Polyethylene Terephthalate) detailed on the data sheet complies with Australian Stand AS-2070 – Plastics Materials for Food Contact Use. It has been tested by independent laboratories and found to be compliant with USFDA regulations.