## **Technical Data sheet of A-PET Film**

**Product name:** APET clear A/B/A quality

Characteristic: A-PET film for thermoforming, laminating

Surface: Without treatment and silicone coating

Thickness range: 150 – 1200 µm

Widths: 80 – 1800 mm

**Layer:** A/B/A (10%/80%/10%)

**Colours:** CLEAR, COLOURED on request

Additives: Antiblock-slip agent SUKANO S479-HP-C (internal)

We hereby confirm that our film is designed to get in direct contact with watery, sour, fatty, alcohol containing and hot food products for human consumption. If the temperature of foodstuff is 70 - 100 °C - contact time should not exceed 15 min.

We hereby declare that our film can contain up to 50 % of Veolia PET bottle flakes (suitable to get in direct contact with foodstuff) in outside layers.

The product herewith complies with the essential requirements of EU directives: 10/2011/EC, 82/711/EEC; 85/572/EEC; 92/39/EEC; 93/43/EEC; 94/62/EC; 1935/2004/EEC; 2023/2006 as well as with the changes and addendum to the above requirements, and Lithuania's Hygiene Norm HN 16:2006 "Destination and special usage conditions of material or a product, designed to get in direct contact with food", confirmed by Minister of Health of the Republic of Lithuania on 2011 May 2nd.

Properties:	Test method	Value	Unit
Thickness tolerances	DON 53270:2006	150 - 300 ± 4 % 301 - 500 ± 3 % 501 - 800 ± 2.5 % 801 - 1200 ± 2 %	μm
Unit weight	EN 150 2286-2	150 - 300 ± 10 % 301 - 600 ± 7 % 601 - 1200 ± 5 %	g/m²
Colour	DIN 5033	Visual control	
Width tolerances	EN 150 1923:1995	±1	mm
Density	EN ISO 1183-2:2004	1,34	g/on <sup>3</sup>
Melting Point	EN ISO 11357-3:2013	245	°C
Intrinsic viscosity (IV)	ASTM D2857	0,60 - 0,75	dl/g
Tensile strength	EN 190 527-3:1995	65 - 70	N/mm <sup>2</sup>
Impact strength	EN 190 8256:2004	≥ 250	k1/m <sup>2</sup>
Coefficient of friction	EN 150 8295:2004	0.2 - 0.4	-
Vicat softening point	BN ISO 306(2004	80	°C
Surface tension	ASTM D 2578	30	dyn
Shrinkage (Oven 125 °C 3 min.) Thickness 400 µm	lengthwise crass	2 - 4 1 - 2	% %
Gas transmission CO <sub>2</sub> O <sub>3</sub> N <sub>2</sub>	DON 53390	14 2,3 0,4	cm³ / m² · 24h · bar
Water vapour transmission 23 °C 85 % RH	EN ISO 15106-3:2003	0,5	g / m² · 24h · bar
Dirt / Black points	Detector / visual (Black points shall not lead to thermoforming issues)	20,20 - s1 mm² - max 8; >1 mm² - max 1	n / 10 m <sup>2</sup>
Fish eyes	Detector / visual (Plah eyes shall not lead to thermoforming issues)	<1 mm² - allowed: 51 - 63 mm² - max 30: >3 mm² - max 2	n / 10 m <sup>2</sup>
Plies and insects	Detector / visual	none	
Pinnholes	Visual	none	
Deep Thermoforming		Suitable	
Thermoforming Temperature		≥ 120	°C
Barrier characteristics		Good	
Application temperature		Min25, Max. +70	°C
Colouring		Possible	









