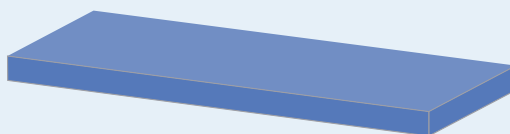


# RayoShrink APS-HS

## Technical Data Sheet

**APS-HS** - A high shrinkage OPS film for shrink sleeve and tamper evident applications.



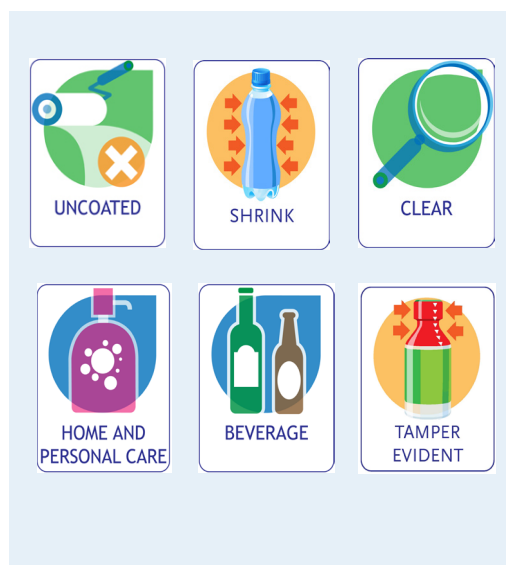
High Shrink Polystyrene Monolayer film

### Features

- High transparency
- High gloss
- High TD shrink performance
- Minimum MD shrink
- Controlled CoF
- Suitable for high speed sleeving
- Excellent printability
- Suitable for complex container shapes
- Suitable for tamper evident applications

### Printability

**RayoShrink APS-HS** is printable across a wide range of traditional flexographic and gravure processes. Exact inks should be recommended by your supplier.



### Technical Properties (Typical Values)

Property	Test Method	Test Conditions	Units	APS-HS		
Thickness	Innovia Films test		micron	40	45	50
Yield	Innovia Films test		m <sup>2</sup> /kg g/m <sup>2</sup>	24.4 41.0	21.7 46.1	19.5 51.3
Haze (wide angle)	Innovia Films test	2.5°	%	<6		
Density	Innovia Films test		g/m <sup>3</sup>	1.025		
Shrinkage	Innovia Films test		%	MD	<6%	
				TD	72%	
Tensile strength	ASTM D 882	Strain rate 50%/min	MN/m <sup>2</sup>	MD	>28	
				TD	>75	
Elongation at break	ASTM D 882	Strain rate 50%/min	%	MD	>250	
				TD	>80	
Coefficient of friction	Innovia Films test			<0.35		

MD Machine Direction TD Transverse Direction

All properties are tested under standard laboratory conditions: 23 ± 2°C, 50 ± 5% RH, unless otherwise stated. Where relevant, tests are based on international testing standards.

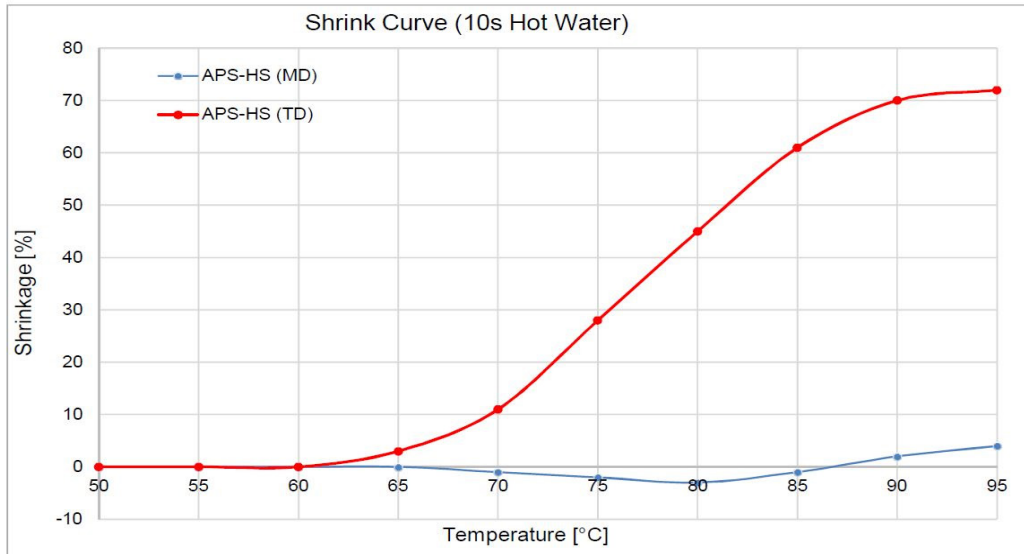
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# RayoShrink APS-HS

## Technical Data Sheet

### Conversion

RayoShrink APS-HS can be used with standard OPS seaming solvents. Suitable for both hot-air and steam tunnels.



### Reel Specifications

#### Nominal Reel Diameters

Film	Core Size/(mm)	Approx Outside Dia/(mm)	Length/(metres)
APS-HS40	153	<750	8700
APS-HS45	153	<750	8300
APS-HS50	153	<750	7700

Alternative reel lengths are available subject to negotiation.

### Film Storage and Handling

For the storage of RayoShrink APS-HS it is recommended that dry conditions at temperatures below 30°C are employed to minimise any deterioration of surface discharge treatment level. RayoShrink APS-S is suitable for use for 6 months from the date of delivery and stocks should be used in rotation. Films should be allowed to reach operating room temperatures for 24 hours before use.

### Food Contact

RayoShrink APS-HS complies with the applicable EU and US legislation for most applications involving direct contact with foods. Full details are given on the Declaration of Compliance. Customers intending to use RayoShrink APS-HS in a food contact application should request a copy of this document from Innovia Films. Details of compliance with food contact legislation in non-EU countries are also available upon request.

### Health & Safety Guidelines

For Health & Safety information, please refer to literature reference L190.

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