

RayoShrink APS-HS

Technical Data Sheet

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



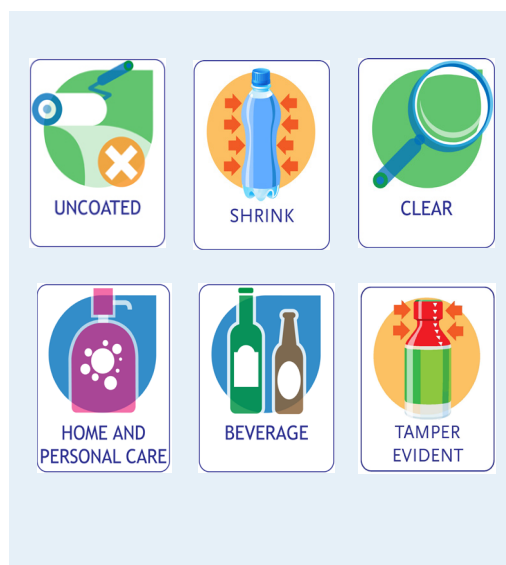
High Shrink Polystyrene Monolayer film

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 ² /kg g/m ² | 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 ³ | 1.025 | | |
| Shrinkage | Innovia Films test | | % | MD | <6% | |
| | | | | TD | 72% | |
| Tensile strength | ASTM D 882 | Strain rate 50%/min | MN/m ² | 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.

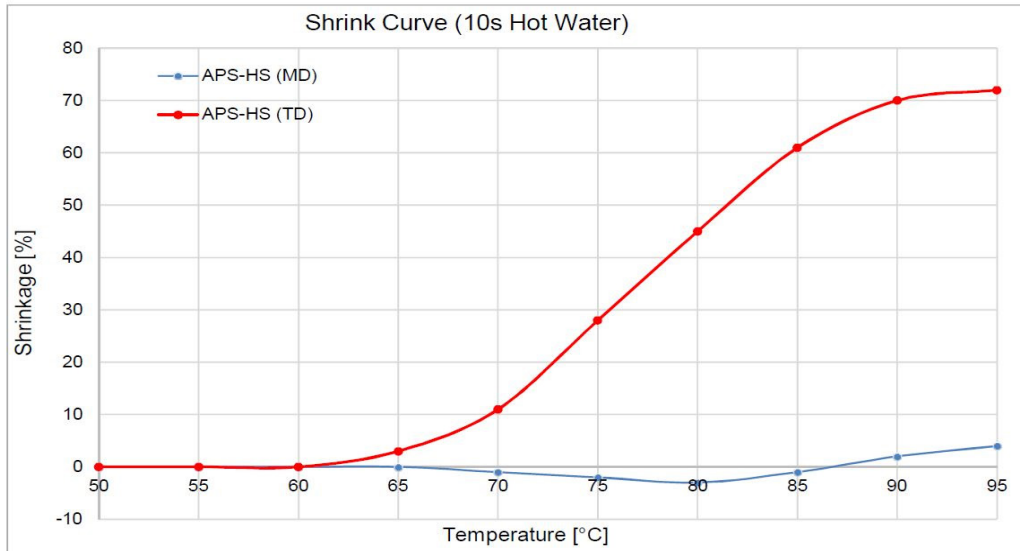
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Conversion

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 | 696 | 8500 |
| APS-HS45 | 153 | 719 | 8100 |
| APS-HS50 | 153 | 729 | 7500 |

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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Regional Offices:

Europe (UK) Tel +44 16973 42281

Americas (USA) Tel +1 800 424 6273

Asia-Pacific (Aus) Tel +61 3 9303 0600

www.innoviafilms.com

email: labels@innoviafilms.com

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