

4HLK Silicone Coated Film



PRODUCT BULLETIN

Description

Hostaphan[®] 4HLK polyester film is silicone coated on one side. Along with high strength, flexibility, and chemical resistance, this product provides consistent release, excellent slip and good dimensional stability over a wide temperature range. This product has been specifically designed to meet the needs of the medical device industry.

Performance

The silicone coating on Hostaphan[®] 4HLK is specially treated prior to winding. This special treatment minimizes back-side transfer of the silicone, which may affect the adhesion. Because the silicone is highly cured, there is essentially no migration of the silicone onto adhesive in contact with the release film. This product has been designed to meet medical device needs and is only available in thicknesses greater than 50µm (2mil).

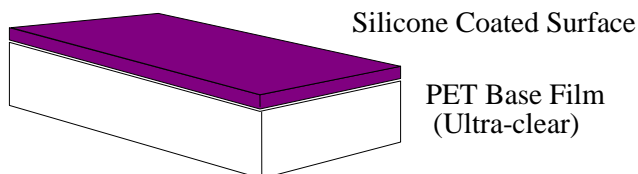
FDA Status for 4HLK

Both sides of Hostaphan[®] 4HLK can be used for direct food contact applications subject to limitations found in 21 CFR 177.1630 and in accordance with good manufacturing practices. For more information, contact your Mitsubishi Polyester Film sales representative.

WARNING:

Silicone coated film is very slippery. Do not discard scrap film on the floor. Injury may result if stepped on.

Schematic of Hostaphan[®] 4HLK



Benefits

- Minimum silicone rub-off
- Provides very consistent release level with aging
- Excellent handling characteristics
- Clear, distortion free coating
- Ultra thin, highly cured coating which does not smear
- Better than 95% subsequent adhesion
- No static induced defects (Newton Rings)

Typical Properties of Hostaphan® 4HLK Film

The Hostaphan® 4HLK property values below are typical measurements. Further guidance on series selection, functional behavior by end use, film processing, standard roll configuration and gauges is available through a Mitsubishi Polyester Film sales representative.

| Property | | Unit of Measure | Typical Value | Test Method | |
|-----------------------------|---------|--|-------------------|------------------|-------------|
| Area Yield | | ft ² /lb (m ² /kg) | 75 µm (3 mil) | 45.8 (9.4) | ASTM D 4321 |
| | | | 100 µm (4 mil) | 34.4 (7.0) | |
| | | | 125 µm (5 mil) | 27.5 (5.6) | |
| Tensile Strength | MD | psi kg/cm ² | 30,000 2,100 | ASTM D 882 | |
| Yield Strength (F5) | MD | psi kg/cm ² | 15,000 1,050 | ASTM D 882 | |
| Ultimate Elongation | MD | % | 115 | ASTM D 882 | |
| Modulus | MD | psi kg/cm ² | 450,000 31,000 | ASTM D 882 | |
| Coefficient of Friction A/B | Kinetic | -- | 0.20 | ASTM D 1894 | |
| Shrinkage | MD | % | 1.5 | 30 min. at 150°C | |
| | TD | | 0.4 | | |
| Density | | g/cm ³ | 1.395 | ASTM D 1505 | |
| Total Haze* | | % | 75 µm (3 mil) | 2.0 | ASTM D-1003 |
| | | | 100 µm (4 mil) | 3.0 | |
| | | | 125 µm (5 mil) | 4.0 | |

SILICONE FUNCTIONALITY

| | | | | |
|---------------|--|------|-----|--|
| Release Level | | g/in | <20 | T-peel from Tesa 7475 adhesive @ 20 in./min. |
|---------------|--|------|-----|--|

* Values for reference data only. Contact a Mitsubishi Polyester Film sales representative for actual gauges available.
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