



SPECIFICATION SHEET

This product specification sheet provides the detail to aid you in identifying the most appropriate product type to meet your company's specific requirements. Please direct questions to: **Ricoh Customer Service 1-800-843-7058**

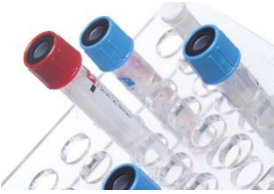
DESCRIPTION

135WRx is a medium sensitivity polypropylene direct thermal film stock with image durability that resists solvents and a durable base film for tear resistance.

KEY FEATURES

Medium sensitivity, moderate image preservation properties; resistant to medical solutions; durable polypropylene base film that is tear and water resistant.

— APPLICATION AREAS —



Laboratory Labels



Wristbands



Medical



Shelf Tags



Industrial

FACESTOCK / PRESERVATION PROPERTIES

FACESTOCK PROPERTIES

| ITEM | | UNIT | SPECIFICATION | TEST METHOD |
|----------------------------------|--------------|------------------------|---------------|---------------------|
| Basis Weight | | lbs (24x36x500 sheets) | 29.5 ± 3.7 | TAPPI T-410 |
| | | g/m ² | 48 ± 6.0 | |
| Caliper | | mil | 2.4 ± 0.3 | TAPPI T-411 |
| | | µm | 61 ± 7.0 | |
| Image Color | | | Black | Visual Check |
| Image Density | (ODU) | Minimum | 1.25 | X-Rite Densitometer |
| Tensile Strength | MD | kgf/15 mm Minimum | 3.8 | TAPPI T-494 |
| | CD | kgf/15 mm Minimum | 10.0 | |
| Stiffness | MD | gf-cm Minimum | 0.98 | TAPPI T-489 |
| | CD | gf-cm Minimum | 1.76 | |
| Initial Activation Temperature | (O.D. = 0.2) | °F / °C | 212 / 100 | |
| Effective Activation Temperature | (O.D. = 0.8) | °F / °C | 257 / 118 | |

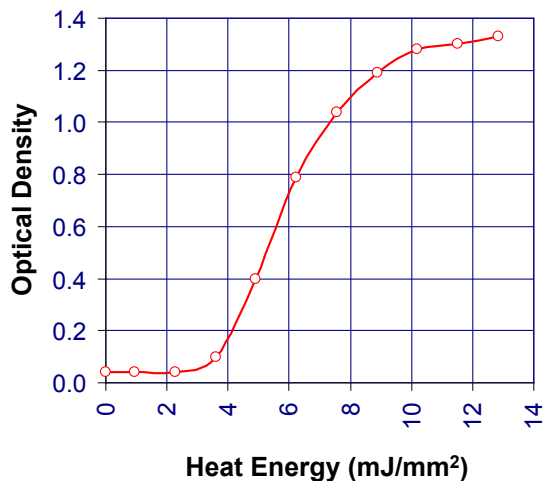
PRESERVATION PROPERTIES

| ITEM | SPECIFICATION | | TEST METHOD |
|---------------------|---------------|--------------|---|
| Water Resistance | Image | 1.10 Minimum | Water Immersion 15 Hours |
| | Background | 0.12 Maximum | |
| Oil Resistance | Image | 1.10 Minimum | 40° C, Dry, 15 Hours X-Rite (ODU) |
| | Background | 0.15 Maximum | |
| Moisture Resistance | Image | 1.10 Minimum | 40° C, 90% RH, 24 Hours X-Rite (ODU) |
| | Background | 0.15 Maximum | |
| Heat Resistance | Image | 1.10 Minimum | 80° C, Dry, 1 Hour X-Rite (ODU) |
| | Background | 0.30 Maximum | |
| Light Resistance | Image | 1.10 Minimum | 5000 lx, 100 Hours X-Rite (ODU) |
| | Background | 0.15 Maximum | |

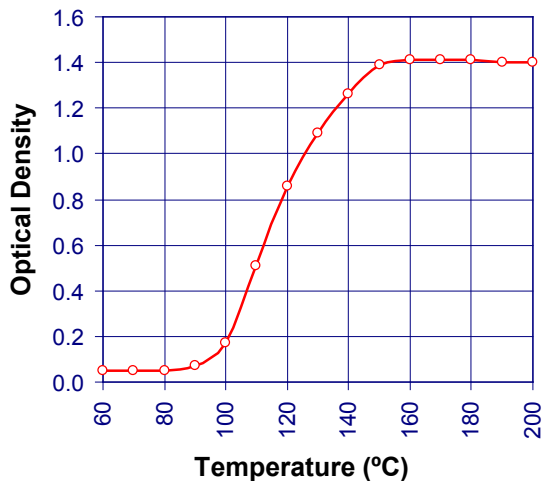


SENSITIVITY RESULTS

Dynamic Sensitivity



Static Sensitivity



Sensitivity curves are for reference only.

Storage Conditions: Below 95°F (35° C) and less than 85% R.H. in a warehouse, avoiding direct sunlight.

Tests performed on Markpoint MP104.

135WRx-60 – LAMINATED PRODUCT

| GRADE | UNIT | G12 |
|-----------------|------------------|------------|
| Application | °F | -40 to 122 |
| Temperature | °C | -40 to 50 |
| Service | °F | -65 to 131 |
| Temperature | °C | -54 to 55 |
| Basis Weight | lbs | 87 ± 6 |
| (24 x 36 x 500) | g/m ² | 141 ± 18 |
| Caliper | µm | 139 ± 21 |
| | mil | 5.5 ± 0.8 |

Liner: 40 lbs
 Caliper: 2.5 mils ± 10% (64 ± 8 µm)
 Opacity: 65% Maximum (Photovolt)

Adhesive Attributes:
 G12 – Wide Temperature and Permanent

CERTIFICATES / REGULATIONS / DIRECTIVES

BPA Free ISO9001 ISO14001 Indirect Food Contact

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