

# RF9020

## THT-IC P&L RFID



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### Description

A glossy high performance label with strong adhesive and very good tack. Excellent chemical resistance due the Print & Laminate construction. This label is provided with an UHF inlay with a scan ability up to 2 meters (depending on surface and surrounding). Please note that this RFID label is not working on metal surfaces.

### Technical data

| Face                        | TOP WHITE   |                  |         |
|-----------------------------|---|------------------|---------|
| Product                     | A cavitated white bi-axially oriented, polypropylene film with a print-receptive topcoat. |                  |         |
| Basis Weight                | 45  | g/m <sup>2</sup> | ISO 536 |
| Caliper                     | 61  | µm               | ISO 534 |
| Maximum Service Temperature | 80  | °C               |         |

| Inlay          |                   |
|----------------|-------------------|
| Antenna Width  | 27mm (1.06")      |
| Antenna Length | 9.7mm (0.38")     |
| Web Width      | 40.0mm (1.575")   |
| Web Pitch      | 15.875mm (0.625") |
| Core Width     | 40.0mm (1.575")   |
| Core ID        | 152.4mm (6")      |
| Core Material  | Fiberboard        |

| RFID                |                  |
|---------------------|------------------|
| Protocols Supported | ISO/IEC 18000-6C |
| Integrated Circuit  | Alien Higgs-4    |
| Operating Frequency | 840-960 MHz      |
| EPC Size            | 128 Bits         |
| User Memory         | 128 Bits         |
| TID                 | 32 Bits          |
| Unique TID          | 64 Bits          |
| Access Password     | 32 Bits          |
| Kill Password       | 32 Bits          |

| Adhesive                | Unit   | Typical Value | Test Method |
|-------------------------|--------|---------------|-------------|
| <b>Peel Adhesion</b>    | N/25mm | 15 to glass   | FINAT 1     |
| <b>Loop Tack</b>        | N/25mm | 16 to glass   | FINAT 9     |
| <b>Service Temp</b>     | °C     | -20 to 50 °C  | ---         |
| <b>Application Temp</b> | °C     | 0 °C          | ---         |

| Backing          | Unit   | Typical Value | Test Method |
|------------------|--------|---------------|-------------|
| <b>Substance</b> | GSM    | 60 ± 5 %      | TAPPI 410   |
| <b>Caliper</b>   | Micron | 54 ± 7 %      | TAPPI 411   |

### Application

**RF9020** Matt White is ideally suited to applications where label durability is required. These include pallet labelling, wet storage and industrial applications and drum labelling. This face stock has good thermal insulating properties. End user testing is required to confirm suitability of all components in end use application. Chemical resistance

### Approvals

**RoHs** 2002/95/EC, 2005/618/EC, 2011/65/EU Compliant

**REACH** 1907/2006/EC Compliant (SVHC and ECHA)

## Laminate

### Description

L7 Laminate is designed as a universal durables labelling solution for clear applications, performing for the lifetime of the labelled product with very good adhesion and good print resistance against chemicals, UV-light, heat and moisture. Its universality helps simplify product portfolios and reduce testing and evaluation of label materials.

### Face material

Clear, glossy, top-coated polyester film.

|                     |                     |           |
|---------------------|---------------------|-----------|
| <b>Basis weight</b> | 70 g/m <sup>2</sup> | DIN 53352 |
| <b>Caliper</b>      | 50 µm               | DIN 53370 |

### Adhesive

Clear permanent adhesive.

|                    |                             |              |
|--------------------|-----------------------------|--------------|
| <b>Composition</b> | Radiation-cured UV-Acrylic. |              |
| <b>Tack</b>        | 20                          | N/25mm FTM 9 |
| <b>Peel 180°</b>   | 23                          | N/25mm FTM 1 |

### Backing

A white transparent glassine backing paper.

|                  |                     |         |
|------------------|---------------------|---------|
| <b>Substance</b> | 60 g/m <sup>2</sup> | ISO 536 |
|------------------|---------------------|---------|

|                            |          |           |
|----------------------------|----------|-----------|
| <b>Caliper</b>             | 53 µm    | ISO 534   |
| <b>Tensile strength MD</b> | 6,6 kN/m | ISO 1924  |
| <b>Tensile strength CD</b> | 2,5 Kn/m | ISO 1924  |
| <b>Transparency</b>        | 50 %     | DIN 53147 |

**Performance**

|                                      |                  |
|--------------------------------------|------------------|
| <b>Total caliper</b>                 | 129 µm           |
| <b>Minimum labelling temperature</b> | 5 °C             |
| <b>Service temperature</b>           | -40 °C to 200 °C |

**Shelf life**

From date of manufacture: 24 months, under FINAT defined storage conditions (+20-25°C and RH 40-50%). Prolonged storage at higher temperatures and/or humidity levels will shorten the shelf life.

**Disclaimer**

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