

## Certificate of Analysis

### Achilles Structural-Fineline Matt Thermal

**Description:** Extruded, biaxially oriented and special coated polypropylen film for thermal lamination.

**Characteristics:** Structure fine-linen matt.

**Treatment:** The not-coated side corona-treated.

| Properties              |     | Unit               | Test-Method         | Typical Values |
|-------------------------|-----|--------------------|---------------------|----------------|
| Thickness               |     | µm                 | Achilles Method     | 32             |
| Tensile Strength        | MD  | MPa                | ASTM D 882          | 79,5           |
|                         | TD  |                    |                     | 134,7          |
| Elongation at break     | MD  | %                  | ASTM D 882          | 177            |
|                         | TD  |                    |                     | 45             |
| Haze                    |     | %                  | ASTM D1003          | 91,9           |
| transparency            |     | %                  | ASTM D1003          | 89,4           |
| Gloss (Matt)            |     | –                  | Achilles Method 60° | 10-12          |
| Coefficient of friction | m/m | –                  | DIN EN ISO 8295     | 0,51           |
| Heat Shrinkage          | MD  | %                  | DIN 53 377          | 10,9           |
|                         | TD  |                    |                     | 5,3            |
| Unit weight             |     | g/m <sup>2</sup>   | ASTM D792           | 20,5           |
| Yield                   |     | m <sup>2</sup> /kg | ASTM D792           | 48,78          |
| Lamination temperature  |     | °C                 |                     | 105            |

MD = machine direction  
TD = cross machine direction

The details contained in this bulletin comply with the current state of our know-how; they do not constitute any extension of the guaranteed services stipulated in our delivery conditions and are in particular no warranted properties. This information bulletin can only provide unbinding advice with regard to differences in printing substrates and working conditions. Before circulation printing begins, it is important for the printers to check by suitable means whether the materials are appropriate for the intended purpose.