

# PA11/CF – UD tape

## Material data sheet

### Description

Unidirectional continuous fiber reinforced tape (UD tape) based on bio-based polyamide 11 and carbon fibers.

### Properties<sup>1</sup>

| Physical properties                                                     | Value | Unit              | Measurement method          |
|-------------------------------------------------------------------------|-------|-------------------|-----------------------------|
| Density                                                                 | 1.24  | g/cm <sup>3</sup> | DIN EN ISO 1183             |
| Thickness                                                               | 0.29  | mm                |                             |
| Width                                                                   | 100   | mm                |                             |
| Fiber mass fraction                                                     | 41    | wt                | Internal method             |
| Fiber volume fraction                                                   | 29    | vol               | Internal method             |
| Weight per unit area                                                    | 370   | g/m <sup>2</sup>  |                             |
| Mechanical properties                                                   |       |                   |                             |
| Tensile strength 0°                                                     | 1030  | MPa               | DIN EN ISO 527 <sup>*</sup> |
| Tensile modulus of elasticity 0°                                        | 63    | GPa               | DIN EN ISO 527 <sup>*</sup> |
| Elongation at break 0°                                                  | 1.6   |                   | DIN EN ISO 527 <sup>*</sup> |
|                                                                         |       |                   |                             |
|                                                                         |       |                   |                             |
| <sup>1</sup> Measured properties that are not considered specifications |       |                   |                             |
| <sup>*</sup> Measured on tape material [UD100_010]                      |       |                   |                             |

The material is a research product and is not commercially available. All information is provided without guarantee.

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