# Comfil<sup>®</sup> 10056 57C-PEEK-1400

Revised: 22.08.2022

## **Description**

Comfil hybrid yarns are made from continuous fibers commingled with continuous matrix filaments. Hybrid yarns can easily be consolidated into composites by heating the material above the matrix filaments melting point.

## **Application**

Comfil hybrid yarns are typically used for the following composite processes: weaving, twisting, braiding, winding, pultrusion, pulextrusion and stitching. Comfil hybrid yarns are delivered free of external sizing, and with a round yarn profile.

#### **Specifications**

Reinforcement fiber	Carbon 12K
Matrix material	PEEK
Linear density of hybrid yarn, tex	1400
Weight reinforcement, %	57
Volume reinforcement, %	49

#### **Packaging and storage**

Hybrid yarns are typically delivered on 73 mm  $\varnothing$  interior cardboard tubes with a 5 kg netto weight. Other dimensions available upon request.

Storage area should be shielded from direct sunlight and kept at ambient temperature below 40° C

## **Typical Properties**

Matrix Tg, C°	143
Matrix Melting Range, C°	343
Consolidation Range, C°	370-400
Hybrid yarn density, g/cm <sup>3</sup>	1,53
Service temperature, C°	180-240
ILSS for consolidates, Mpa	90-100



