

ALCOM[®] 3D

Technical functionality in printing



ALCOM[®] 3D enables the manufacturing of technical filaments for 3D-printing. Functional properties such as tribology, thermal conductivity or diverse metallic effects can be integrated into the filament.

This product series combines the advantages of additive manufacturing with the advanced technical functions of our well-known ALCOM[®] portfolio. With optimized compositions, ALCOM[®] 3D compounds are specifically applicable for the production of filaments for Fused Layer Modeling (FLM).

ALCOM[®] 3D offers a selection of technical solutions for challenging applications such as:

ALCOM[®] 3D CFX – Color Effects

Metallic appearance

ALCOM[®] 3D TC – Thermally Conductive

Thermally conductive materials

ALCOM[®] 3D WP – Wear Protect

Improved tribological properties

These technical innovations open up new possibilities in the field of 3D-printing for new applications in various industry sectors such as the Automotive, Electro and Electronics industry.

The ALCOM[®] 3D portfolio already offers diverse products. We are pleased in helping you to develop individual products that meet your needs.

ALCOM[®] 3D: advantages at a glance

- High manufacturing quality in printing and filament production
- Specified material properties
- Integrated functions
- For functional components
- Variety of polymers possible
- Based on technical plastics

ALCOM® 3D WP – Wear Protect

Polymer	Material name	Filler	Color	Load pv product [MPa · m/s]*	Coefficient of sliding friction μ^*
PC	ALCOM® 3D WP PC 5015 PTFE 16083 NC0001-00	PTFF	Natural	3 · 1	0.24

* measured via pin-disk tribometer

ALCOM® 3D TCE – Thermally Conductive

Polymer	Material name	Filler	Color	Thermal conductivity Hot Disk / integral ISO22007-2 [W/mK]	Thermal conductivity Laserflash in-plane ASTM E 1461 [W/mK]	Thermal conductivity Laserflash through plane ASTM E 1461 [W/mK]
PC	ALCOM® 3D TCE PC 5020 15011 BK0002-00	–	Black	0.7	1.1	0.5

ALCOM® 3D CFX – Color Effects

(under development)

Polymer	Material name	Filler	Color
PC	ALCOM® 3D CFX PC	–	Silver metallic
ABS	ALCOM® 3D CFX ABS	–	Grey metallic

Additional products and information are available on request.

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