Alcom® 3D
3D Printing
Functional material

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 Deposition Modeling (FDM).

Alcom® 3D offers a selection of technical solutions for challenging applications such as:

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, Electrical & 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: the advantages at a glance

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

Alcom® 3D MS – easy print

Polymer	Material name	Filler	Color
PC	Alcom® 3D MS PC 1000 17008 NC0001-00	–	Natural/ white

Alcom® 3D LB – Light Blocking

Polymer	Material name	Filler	Color	Tristimulus Value Y10 of Reflection DIN 5033 *	Tristimulus Value Y10 of Transmission; d = 0,5 mm ISO 13468 *
PC	Alcom® 3D LB PC 1000 17189 WT1195-17	–	White	92 %	0.3 %

* Values measured on molded test specimen

Alcom® 3D WP

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	PTFE	natural	3 x 1	0.24

* measured with pin on disk tribometer

Alcom® 3D TCE

Polymer	Material name	Filler	Color	Thermal Conductivity integral ISO 22007-2 [W/mK] *	Thermal Conductivity Laser flash in-plane ASTM E 1461 [W/mK] *	Thermal Conductivity Laser flash through plane ASTM E 1461 [W/mK] *
PC	Alcom® 3D TCE PC 5020 15011 BK0002-00	–	Black	0.7	1.1	0.5

* Values measured on molded test specimen

Additional products and information are available on request.

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