

Connecting strengths

Plug into the PPA Ultramid® Advanced T2000

Ultramid® Advanced T2000 is based on PA 6T/66 and also available with flame retardant additives. It combines excellent mechanical with dielectric strength at high temperatures - a combination which is particularly needed for connectors in the electrical and electronics (E&E) industry.

BASF
We create chemistry



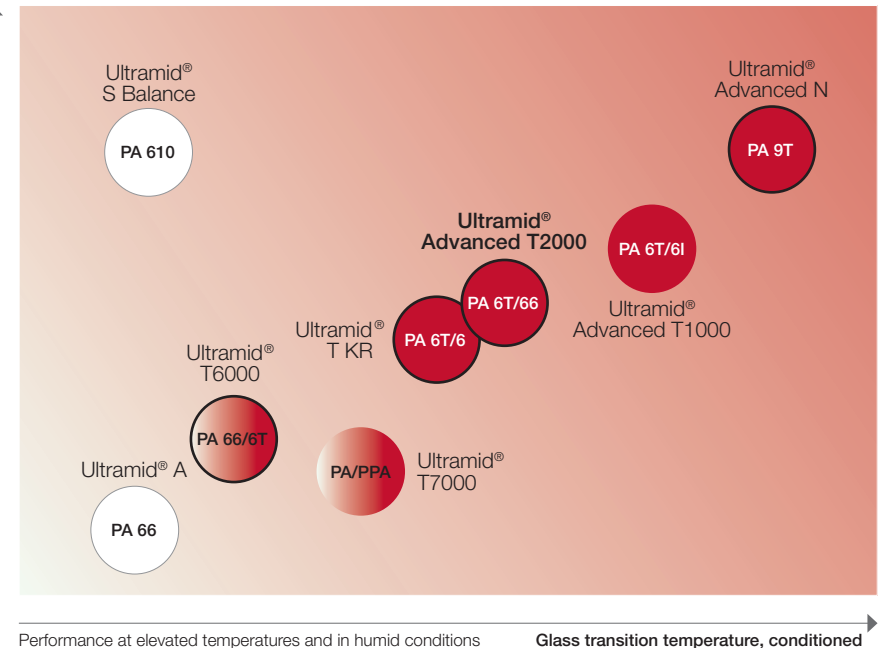
chemical resistance
low water uptake
dimensional stability
hydrophobicity

● PPA =
Polyphthalamide

● PPA blend or PPA
copolymer, < 55%
aromatic diacid
content

○ PA = Polyamide

○ Flame retardant
grades available



ULTRAMID® ADV

Ultramid® Advanced T2340G6 LS black

- V-0 UL rating at 0.4 mm
- Highest flowability:
Flow spiral length of 400 mm at 320 °C
 T_{melt} and 140 °C T_{mold}

Excellent flame retardant properties and good surface

- Due to high T_{melt} excellent for SMT
- High HDT (> 280 °C)
- FR grades, halogen-free with V-0 down to 0.4 mm
- For E&E applications with demanding properties



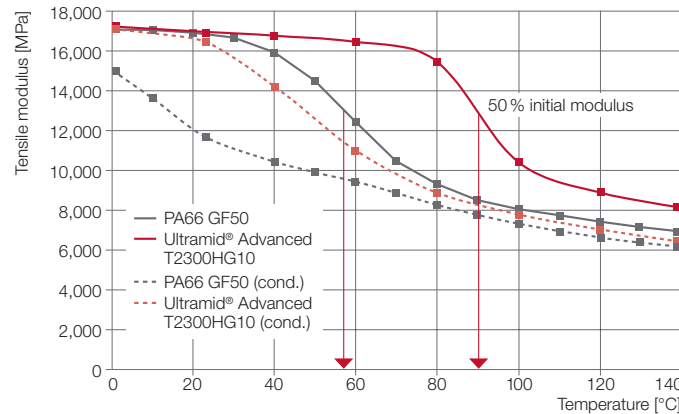
Outstanding
chemical
resistance



Perfect
lead-free
soldering



High
dimensional
stability

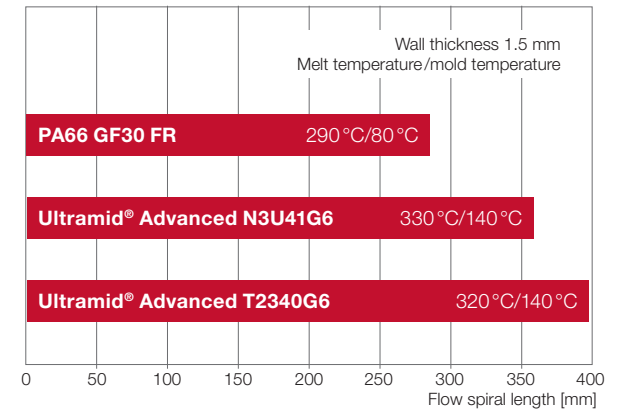


Stable mechanical properties: Up to 30 °C higher temperatures than PA66

- Constant mechanical properties over a broad temperature range
- Extended temperature range compared to PA66
- High stiffness and strength
- Low water uptake with little influence on properties
- Dimensioning of parts easier



Stable mechanics
at elevated
temperatures



Excellent flowability

- Higher flowability than PA66
- Thin-wall parts and long flow lengths feasible

ADVANCED T2000

Mechanical properties

Ultramid® Advanced	Tensile modulus at 23 °C ISO 527-1/-2 [MPa]	Stress at break at 23 °C ISO 527-1/-2 [MPa]	Strain at break at 23 °C ISO 527-1/-2 [%]	Charpy unnotched impact strength at 23 °C ISO 179/1eU [kJ/m²]	Charpy notched impact strength at 23 °C ISO 179/1eA [kJ/m²]
T2300EG6	10,200 / cond. 10,200	188 / cond. 157	2.8 / cond. 3.2	86 / cond. 77	8.7 / cond. 9
T2300HG10	16,500 / cond. 16,500	235 / cond. 193	2.3 / cond. 2.2	90 / cond. 80	10.8 / cond. 10
T2300ZG3	5,300 / cond. 5,000	115 / cond. 85	3.8 / cond. 4.1	75 / cond. 65	13 / cond. 13
T2340G6	10,500 / cond. 10,500	150 / cond. 130	2.5 / cond. 2.5	60 / cond. 55	7 / cond. 7

E&E properties

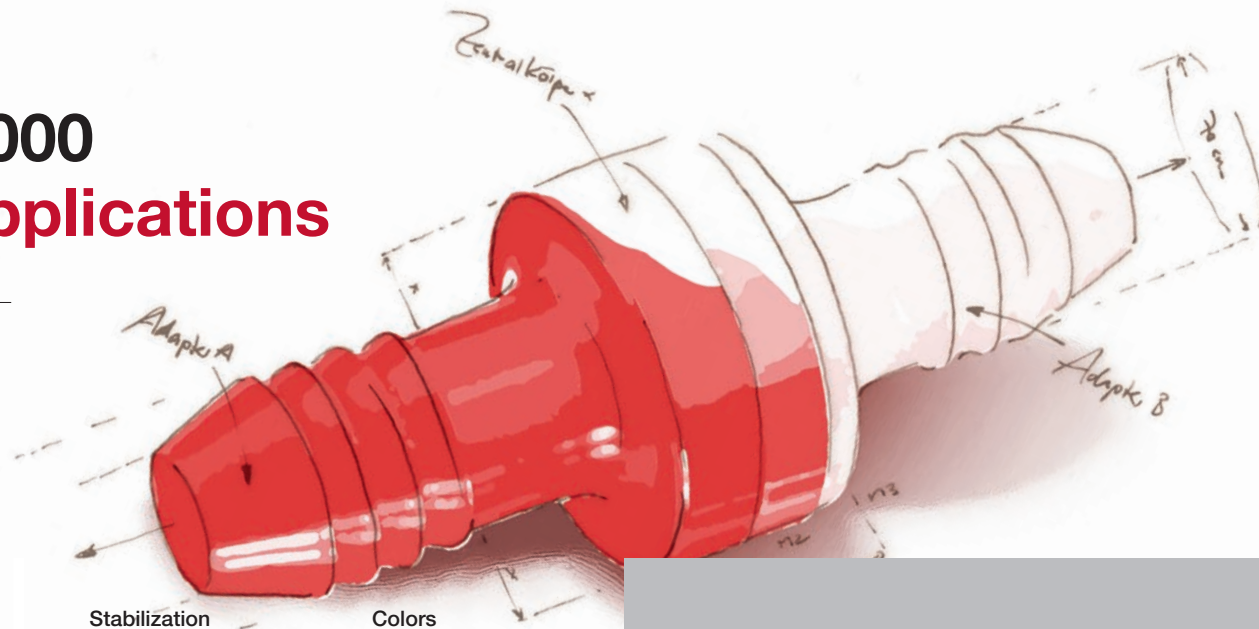
Ultramid® Advanced	UL 94 results (thickness) UL94, IEC 60695 Class [mm]	GWFI (thickness) IEC 60695-2-12 [°C (mm)]	CTI Solution A IEC 60112
	Flammability		Electrical properties
T2300EG6	HB (0.4)	-	600
T2300HG10	HB (0.4)	-	600
T2300ZG3	HB (0.4)	-	600
T2340G6	V-0 5VA (1.5)	960 (1.5)	600

Processing

Ultramid® Advanced	Melt temperature injection molding / extrusion [°C]	Mold temperature injection molding [°C]
T2300EG6	320-340	120-160
T2300HG10	320-340	120-140
T2300ZG3	320-340	120-160
T2340G6	310-330	140-160

Ultramid® Advanced T2000

Product portfolio and applications



	Ultramid® Advanced	Reinforcement	Stabilization	Colors
Glass-fiber reinforced	T2300EG6	30 % GF	standard (E)	LS bk, un
	T2300HG6	30 % GF	standard (H)	LS bk
	T2300HG7	35 % GF	standard (H)	LS bk
	T2300EG8	40 % GF	standard (E)	Un
	T2300EG10	50 % GF	standard (E)	Un
	T2300HG10	50 % GF	standard (H)	LS bk
Flame retardant	T2340G6	30 % GF	standard, FR	LS bk, un, colors*
	T2340G7	35 % GF	standard, FR	LS bk, grey
Impact modified	T2300ZG3	15 % GF	standard (H)	LS bk, un

LS: laser sensitive

* Besides pre-colored compounds in grey, orange or other colors, UL® certified masterbatches available for self-coloring.



The right material for the right part: choose the suitable material for your application!
PPA Product Selector on www.ppa.basf.com

For demanding applications

- Connectors (e.g., auto connectors)
- Miniature circuit breakers
- Power electronics
- Electric powertrain
- Motors & actuators

Note

The data contained in this publication are based on our current knowledge and experience. In view of the many factors that may affect processing and application of our product, these data do not relieve processors from carrying out own investigations and tests; neither do these data imply any guarantee of certain properties, nor the suitability of the product for a specific purpose. Any descriptions, drawings, photographs, data, proportions, weights etc. given herein may change without prior information and do not constitute the agreed contractual quality of the product. It is the responsibility of the recipient of our products to ensure that any proprietary rights and existing laws and legislation are observed. (February 2025)

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