

# TEREZ<sup>®</sup> PA



# Portfolio

## TEREZ Polyamide 6, 66 and highly filled Performance Nylons

Since the development of Polyamide 6 and 66 in the 1930s, there have been numerous further developments and new fields of application for the two polyamide classics. Polyamides are materials with high strength and rigidity, excellent stiffness as well as good abrasion and wear resistance.

Polyamides are often reinforced with glass fibers to increase stiffness and strength and to achieve the required property profile. In addition to increasing strength and flexural modulus, higher continuous use temperatures are also achieved. Depending on the structure of the polyamides, the application limits remain its mechanical properties in demanding environments. This makes PC/ABS an

ideal choice for applications where durability and thermal resistance are crucial. From about -30 °C to over +100 °C; short-term temperatures of about 140 °C to 180 °C and above are possible. Polyamides react to moisture in the environment and absorb it reversibly. After moisture absorption, impact resistance increases while strength and stiffness decrease at the same time.

Due to their good mechanical properties, polyamides have replaced many metal applications and are mainly used in automotive, electrical and mechanical engineering. Components in the engine compartment, in contact with oils, greases or directly in the cooling circuit have a firm place in classic polyamide applications. In addition, typical applications include gears, rollers, filters and housings for power tools.



# Nomenclature

Polymer Nomenclature	
B	PA 6
A	PA 66
AB	PA 66 + PA 6
GT2	PA MXD6
GT3	PA 66 + PA (6I/6T)
GT4	PA 66 + PA (6I/6T)
HT	PPA (6T/6I)

Additional functional properties	
H	Various long-term heat stabilization systems for different requirements
A	Various long-term Hydrolysis Resistance systems for different requirements
UV	Various long-term UV Resistance systems for different requirements
CA	Constant antistatic effect
LM	Laser markable
ABF	Antimicrobial and anti fungal
SF	Super Flow Grades
CSM	Customer-specific modification / More than 3 additional functional properties
I	Impact modification down to 0°C
SI	Impact modification down to -40°C

VW	Position 1	Raw material sources
GK1C	100	Chemical Recycling
GK1B	200	Bio based
GK1A	300	Prime Compound
GK3	400	Post Industrial Rezyclate
GK4	500	Post Consumer Rezyclate
GK3+4	600	PIR + PCR

Reinforcing Fiber / Filler	
G	Glass Fiber
GX	Flat Glass Fiber
GL	Long Glass Fiber
B	Glass Beads
M	Mineral Filled
TF	PTFE

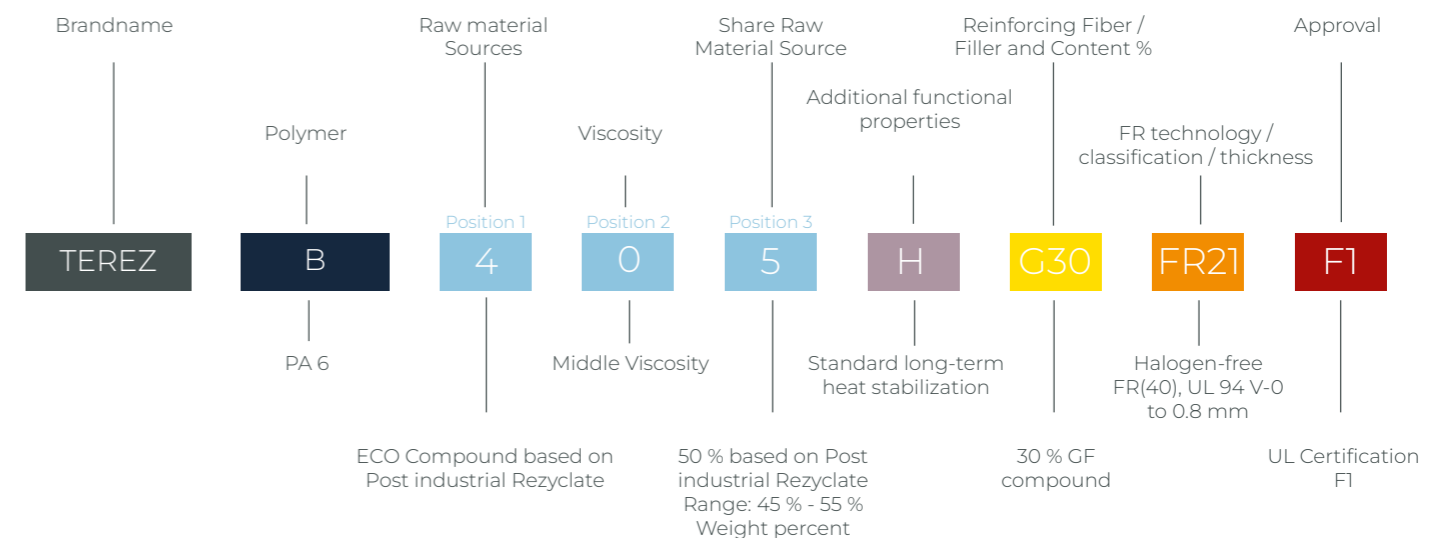
FR - System	UL 94	ISO 1043
FR2	HF HR	V-0
FR3	HF HR	V-0
FR4	HF HR	V-2
FR6	HF HR	V-0

Flame retardant classification is thickness dependent	
FR20	UL 94 V-0 until 0,4 – 0,6 mm
FR21	UL 94 V-0 until 0,8 mm
FR22	UL 94 V-0 until 1,6 mm
FR23	UL 94 V-0 until 3,2 mm

Position 2	Viscosity
TEREZ B 300	Middle Viscosity
TEREZ B 310	Low Viscosity
TEREZ B 320	High Viscosity

Position 3	Range	%
401	5-15	10
402	15-25	20
403	25-35	30
404	35-45	40
405	45-55	50
406	55-65	60
407	65-75	70
408	75-85	80
409	85-95	90
400	95-100	100

Approval	
MO	No LTDS
W	Drinking water contact
L	Food contact
F1	Weather resistance / UL Certification



## Polymer Bases

TER Plastics POLYMER GROUP collaborates globally with top producers of plastics, fillers, and additives, benefiting their TEREZ polyamides. They use polyamide 6 and 66 from various sources, all subjected to strict inspections supported by IT systems to prevent errors.

**TEREZ PA Prime:** Uses original raw materials, versatile for reinforcement, modification, and coloring, designated as “300”.

**TEREZ PA Near Prime:** Cost-effective, similar properties to the 300 series, with some color variability, ideal for black applications, designated as “301” and “302”.

**TEREZ PA Eco:** Focuses on recycled materials, meeting ecological demands. Supported by the EU End-of-Life Vehicles Regulation, it uses fiber residues and faulty parts, ensuring high-quality compounds through rigorous testing. The resulting materials are often black and comparable to prime grades.

**TEREZ highly filled Performance Nylons** offer several advantages over other materials. They are significantly stronger and stiffer, making them ideal for high mechanical loads. They are also much lighter than metals like steel or aluminium, leading to weight reduction and energy savings in automotive and aerospace industries. Additionally, they resist many chemicals, withstand higher temperatures, do not rust or corrode, and can be easily moulded into complex shapes, providing design flexibility.

### PA 6 Portfolio

	Standard PA 6 Compounds	Standard PA 6 H Compounds	Special PA 6 Compounds		Impact Modified PA 6 Compounds	Low Warpage PA 6 Compounds	Flame-retardant PA 6 Compounds	Friction Modified PA 6 Compounds
<b>Unfilled</b>		TEREZ B 310 H TEREZ B 407 H			TEREZ B 300 H I1 TEREZ B 300 H I2 TEREZ B 300 H SI2 TEREZ B 300 H SI3 TEREZ B 310 H SI3 TEREZ B 427 H I2		TEREZ B 300 H FR41 TEREZ B 300 H FR61	TEREZ B 300 H TF5
<b>10% Filled</b>	TEREZ B 300 G10	TEREZ B 300 H G10 TEREZ B 310 H G10 TEREZ B 408 H G10						
<b>15% Filled</b>	TEREZ B 300 G15	TEREZ B 300 H G15 TEREZ B 408 H G15				TEREZ B 300 H B15	TEREZ B 300 H B15 FR22	
<b>20% Filled</b>	TEREZ B 300 G20	TEREZ B 300 H G20 TEREZ B 408 H G20				TEREZ B 300 H B20	TEREZ B 310 H MP20 FR41 TEREZ B 310 H G20 FR41	TEREZ B 300 H G20 TF20
<b>25% Filled</b>	TEREZ B 300 G25	TEREZ B 300 H G25 TEREZ B 408 H G25					TEREZ B 310 H MP25 FR41 TEREZ B 310 H G25 FR41 TEREZ B 300 H30 G25 FR21 TEREZ B 300 H30 G25 FR22	
<b>30% Filled</b>	TEREZ B 300 G30	TEREZ B 300 H G30 TEREZ B 403 H G30 TEREZ B 408 H G30 TEREZ B 603 H G30 TEREZ B 605 H G30 TEREZ B 607 H G30	TEREZ B 300 H30 G30 TEREZ B 310 H30 G30 F1 TEREZ B 300 H32 G30 TEREZ B 403 H32 G30 TEREZ B 407 H32 G30		TEREZ B 300 H I2 G30 TEREZ B 405 H CSM G30 TEREZ B 300 H30 I1 G30 TEREZ B 300 H30 I2 G30 TEREZ B 300 H30 SI1 G30 TEREZ B 300 H30 SI2 G30	TEREZ B 300 H B30 TEREZ B 403 H B30 TEREZ B 407 H B30 TEREZ B 300 H G10 B20 TEREZ B 300 H G15 B15 TEREZ B 300 H MT30	TEREZ B 300 H30 G30 FR21 TEREZ B 403 H30 G30 FR21 TEREZ B 300 H30 G30 FR22 TEREZ B 310 H G30 FR32	TEREZ B 310 H G30 TF15
<b>35% Filled</b>	TEREZ B 300 G35	TEREZ B 310 H G35 TEREZ B 403 H G35 TEREZ B 408 H G35	TEREZ B 310 H30 G35 TEREZ B 310 H32 G35				TEREZ B 310 H30 G35 FR21 TEREZ B 310 H30 G35 FR22	
<b>40% Filled</b>	TEREZ B 300 G40	TEREZ B 310 H G40			TEREZ B 300 H SI1 G40 TEREZ B 405 H CSM G40	TEREZ B 300 H G15 MT25 TEREZ B 300 H MT40 TEREZ B 300 H MX40	TEREZ B 310 H30 G40 FR21	
<b>45% Filled</b>	TEREZ B 300 G45	TEREZ B 310 H G45			TEREZ B 403 H CSM G45		TEREZ B 310 H30 G45 FR22	
<b>50% Filled</b>	TEREZ B 300 G50	TEREZ B 310 H G50 TEREZ B 403 H G50 TEREZ B 406 H G50	TEREZ B 310 H30 G50 TEREZ B 310 H32 G50 TEREZ B 403 H30 G50					
<b>60% Filled</b>	TEREZ B 310 G60	TEREZ B 310 H G60 TEREZ B 406 H G60						

\*ECO Grades in green

### PA 66 Portfolio

	Standard PA 66 Compounds	Standard PA 66 H Compounds	Special PA 66 Compounds		Impact Modified PA 66 Compounds	Low Warpage PA 66 Compounds	Flame-retardant PA 66 Compounds	Friction Modified PA 66 Compounds
<b>Unfilled</b>					TEREZ A 300 H I1 TEREZ A 409 H I1 TEREZ A 300 H I2 TEREZ A 409 H I2 TEREZ A 310 H I3 TEREZ A 300 H SI1 TEREZ A 300 H SI2 TEREZ A 300 H SI4		TEREZ A 300 H FR61	
<b>10% Filled</b>	TEREZ A 300 G10	TEREZ A 300 H G10						
<b>15% Filled</b>	TEREZ A 300 G15	TEREZ A 300 H G15			TEREZ A 300 H32 I2 G15			TEREZ A 300 H TF15 UV1
<b>20% Filled</b>	TEREZ A 300 G20	TEREZ A 300 H G20						
<b>25% Filled</b>	TEREZ A 300 G25	TEREZ A 300 H G25						
<b>30% Filled</b>	TEREZ A 300 G30	TEREZ A 300 H G30 TEREZ A 408 H G30 TEREZ A 603 H G30 TEREZ A 605 H G30 TEREZ A 607 H G30	TEREZ A 300 H32 G30 TEREZ A 407 H32 G30		TEREZ A 300 H I2 G30 TEREZ A 300 H SI2 G30	TEREZ A 300 H B30	TEREZ A 300 H30 G30 FR21 TEREZ A 300 H30 G30 FR22 TEREZ A 403 H30 G30 FR21	TEREZ A 300 H G30 TF15
<b>35% Filled</b>	TEREZ A 300 G35	TEREZ A 310 H G35	TEREZ A 300 H32 G35 TEREZ A 408 H32 G35 TEREZ A 406 HR1 G35 TEREZ A 406 HR2 G35					
<b>40% Filled</b>	TEREZ A 300 G40	TEREZ A 310 H G40				TEREZ A 300 H MT40 TEREZ A 300 H3 B40	TEREZ A 300 H G40 FR21 TEREZ A 310 H G40 FR21	TEREZ A 300 H G40 TF15
<b>45% Filled</b>	TEREZ A 300 G45	TEREZ A 310 H G45					TEREZ A 310 H30 G45 FR22	
<b>50% Filled</b>	TEREZ A 300 G50	TEREZ A 310 H G50 TEREZ A 407 H G50	TEREZ A 300 H32 G50 TEREZ A 405 H32 G50					
<b>60% Filled</b>	TEREZ A 310 G60	TEREZ A 310 H G60						

\*ECO Grades in green

### Highly Filled Performance Nylons

	PA6 Highly Filled Compounds	PA 66 + 6 Highly Filled Compounds	PA 66 Highly Filled Compounds		GT2 Highly Filled Compounds	GT3 Highly Filled Compounds	GT4 Highly Filled Compounds	HT Highly Filled Compounds
<b>30% Filled</b>	TEREZ B 310 H1 GL30 TEREZ B 414 H1 GL30	TEREZ AB 310 H1 GL30 TEREZ AB 414 H1 GL30	TEREZ A 310 H1 GL40 TEREZ A 413 H1 GL40		TEREZ GT2 300 H G30 TEREZ GT2 310 H GL30	TEREZ GT3 300 H G30 TEREZ GT3 300 H G30 W TEREZ GT3 300 H GX30 TEREZ GT3 310 H GL30	TEREZ A 300 H G30 TF15	TEREZ HT 300 H30 G30 TEREZ HT 300 H32 G30
<b>35% Filled</b>					TEREZ GT2 300 H G35 FR21			TEREZ HT 300 H30 G35 TEREZ HT 300 H32 G35
<b>40% Filled</b>	TEREZ B 310 H1 GL40 TEREZ B 413 H1 GL40	TEREZ AB 310 H1 GL40 TEREZ AB 413 H1 GL40	TEREZ A 310 H1 GL40 TEREZ A 413 H1 GL40		TEREZ GT2 300 H G40 TEREZ GT2 310 H GL40	TEREZ GT3 310 H G40 TEREZ GT3 300 H G40 W TEREZ GT3 300 H GX40 TEREZ GT3 310 H GL40	TEREZ A 300 H G40 TF15	TEREZ HT 300 H30 G40 TEREZ HT 300 H32 G40
<b>45% Filled</b>					TEREZ GT2 300 H G45 TEREZ GT2 300 H G45 FR21	TEREZ GT3 310 H G45 TEREZ GT3 310 H GX45 TEREZ GT4 310 H G45		TEREZ HT 300 H30 G45 TEREZ HT 300 H32 G45
<b>50% Filled</b>	TEREZ B 310 H G50 TEREZ B 310 H GX50 TEREZ B 310 H1 GL50 TEREZ B 413 H1 GL50	TEREZ AB 310 H G50 TEREZ AB 310 H GX50 TEREZ AB 310 H1 GL50 TEREZ AB 413 H1 GL50	TEREZ A 310 H G50 TEREZ A 310 H GX50 TEREZ A 310 H1 GL50 TEREZ A 413 H1 GL50		TEREZ GT2 300 H G50 TEREZ GT2 300 H GL50	TEREZ GT3 310 H G50 TEREZ GT3 300 H G50 W TEREZ GT3 310 H GX50 TEREZ GT3 310 H GL50 TEREZ GT3 403 H G50 TEREZ GT3 403 H G50 ABF	TEREZ GT4 310 H G50	TEREZ HT 300 H30 G50 TEREZ HT 300 H32 G50
<b>60% Filled</b>	TEREZ B 310 H G60 TEREZ B 310 H GX60	TEREZ AB 310 H G60 TEREZ AB 310 H GX60	TEREZ A 310 H G60 TEREZ A 310 H GX60		TEREZ GT2 300 H G60	TEREZ GT3 310 H G60 TEREZ GT3 300 H G60 W TEREZ GT3 310 H GX60	TEREZ GT4 310 H G60	TEREZ HT 300 H30 G60 TEREZ HT 300 H32 G60

\*ECO Grades in green