



SPECIALTY ENGINEERED MATERIALS

ASIA PORTFOLIO



Appliance



Building & Construction



Consumer



Healthcare



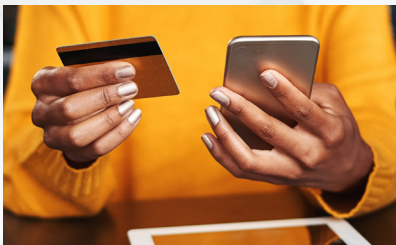
Electronics & Electrical



Packaging



Transportation



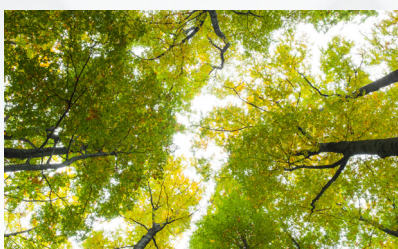
BUYING POWER



DEMOGRAPHIC



URBANIZATION



SUSTAINABILITY



HEALTHCARE

WHAT WE DO

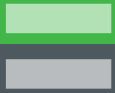
INPUTS

- Base resins
- Additives
- Modifiers
- Colorants



EXPERTISE

Formulation expertise in polymer materials, services and solutions



VALUE

- OEMs
- Brand owners
- Processors
- Assemblers



We know that you face challenging applications every day. That's why we are here. We're ready to meet all of your supply needs for engineered polymer formulations and thermoplastic elastomers.

With a comprehensive portfolio of high-performance and sustainable materials, Avient

offers the broadest range of solutions, capabilities, and resources designed to satisfy even the most demanding industries—from consumer and packaging to transportation and healthcare.

Our services range from engineering support to industrial design, and we can help drive your project from concept to reality.

ENGINEERED POLYMERS

Stat-Tech™

Electrically conductive &
EMI/RFI shielding

LubriOne™

Internally lubricated

Edgetek™

High strength & high
temperature performance

Edgetek™

Dk/Df series
3D-MID (Molded Interconnect
Device) with LDS process

Preperm™

Low loss dielectric
thermoplastics

Maxxam™

Polyolefin-based

Bergadur™

Polyester-based

Bergamid™

Polyamide-based

Gravi-Tech™

Metal replacement,
density modified

Therma-Tech™

Thermally conductive

OnForce™ & Complēt™

Long fiber reinforced

Trilliant™ HC Healthcare Thermoplastics

Chemically resistant &
compliant with regulatory
requirements

Sustainable Engineered Material Solutions

Bio-based polyamide
solutions & recycled solutions



THERMOPLASTIC ELASTOMER (TPE)

Soft-Touch & Easy Processed TPEs

Good tactile qualities and ergonomics

Low Voc/Fog/Odor TPEs

Reduced volatile organic compounds (VOCs) and fogging

Specialty Nylon Overmolding TPEs

Overmolded onto various nylon substrates to enhance performance and ergonomics

Sustainable Content TPEs

Based on renewable resources rather than petroleum

Chemically Resistant TPEs

Long life and excellent chemical resistance

Vibration Damping TPEs

Dampen vibrations via energy transfer

Healthcare TPEs

Compliant with regulatory requirements

Food Grade TPEs

Suitable for use in contact with food



ELECTRICALLY CONDUCTIVE FORMULATIONS

Stat-Tech™ Static Dissipative & Electrically Conductive Formulations

Reinforced short fiber and long fiber conductive polymer formulations with a surface resistivity range of 10^9 to 10^{12} ohm/sq

- Reduces weight, improves design freedom and allows for consolidation of parts
- Protection from static buildup to minimize sparks from damaging nearby electrical components
- Prevents interference from electromagnetic and radio frequency (EMI/RFI) in critical electronic components
- Reduces attraction of powder and fine particles

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL
NN-10CF/000 BK001	PA66	CF	10	PA66+CF	Black	HB/3.2mm	N
A70 C20 BK007	PA66	CF	20	PA66+CF	Black	HB/3.2mm	N
NN-30CF/000 BK006	PA66	CF	30	PA66+CF	Black	HB/3.2mm	N
NN-40CF/000 FRVO NATURAL	PA66	CF	40	PA66+CF FR	Natural	V-1/0.75mm,V-0/3mm	Y
NN-40CF/000 NHFR VO NATURAL	PA66	CF	40	PA66+CF NHFR	Natural	V-0/0.75mm,V-0,5VA/3mm	Y
ST6000-8009 RS BLACK	PA6	CF	20	PA6+CF	Black	HB/3.2mm	N
ST6000-8028 ESD BK001	PA6	CF	30	PA6+CF	Black	HB/3.2mm	N
NY-40CF/000 BLACK	PA6	CF	40	PA6+CF	Black	HB/3.2mm	N
ST3200-8118 ESD BK001	PC	CB	15	PC+CB	Black	HB/3.2mm	N
PC-30CF/000 BK701	PC	CF	30	PC+CF	Black	HB/1.6mm	N
PC-10CF/000 NH FR BK033	PC	CF	10	PC+CF NH FR	Black	V-0/3.2mm	Y
PC-15CF-15GF/000 NH FR VO BLACK	PC	CF+GF	15	PC+CF+GF NHFR	Black	V-1/1.5mm; V-0/3.0mm	Y
AS-10CF/000 BK001	ABS	CF	10	ABS+CF	Black	HB/1.6mm	N
AS-20CF/000 BK001	ABS	CF	20	ABS+CF	Black	HB/3.2mm	N
AS-10CF/000 FR BK004	ABS	CF	10	ABS+CF FR	Black	V-0/1.6mm	N
ST9600-8007 ESD BK001	LCP	CF/Mineral	30/15	LCP+CF+Mineral	Black	V-0/0.4mm	N
PK-30CF/000 BK	PEEK	CF	30	PEEK+CF	Black	V-0/0.8mm	N
ST9800-8048 CR ESD BK001	PEEK	CNT	—	PEEK+CNT	Black	HB/3.2mm	N
AT-11CB/000 BLACK	POM	CB	11	POM+CB	Black	HB/3.2mm	N
AT-10CF/000 BLACK	POM	CF	10	POM+CF	Black	HB/1.6mm	N
ST5200-8035 ESD BK001	PP	CB	15	PP+CB	Black	HB/1.5mm,HB/3mm	Y
ST7400-8016 ESD BK006	PS	CB	15	HIPS+CB Carrier Tape	Black	HB/3.2mm	N
NJ-30CF/000 BK001	PA12	CF	30	PA12+CF	Black	HB/3.2mm	N

INTERNALLY LUBRICATED SOLUTIONS

LubriOne™ Internally Lubricated Formulations

Self-lubricating material with low coefficient of friction and improved wear-resistance

- Improves product durability
- Reduces friction, heat buildup and vibration
- Improved process ability
- Excellent property retention and reduced maintenance over time

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL
NN-30CF/15T BK005	PA66	CF	30	PA66+CF+PTFE	Black	HB/1.6mm	N
NN-30GF/15T NC059	PA66	GF	30	PA66+GF+PTFE	Natural	HB/1.6mm	N
NN-30GF/13T-2S BLACK	PA66	GF	30	PA66+GF+PTFE+Si	Black	HB/1.6mm	N
NN-000/20T BK011	PA66	—	—	PA66+PTFE	Black	HB/3.2mm	N
PC-000/05T BLACK	PC	—	—	PC+PTFE	Black	HB/1.6mm	Y
PC-15CF/10T-2S BLK	PC	CF	15	PC+CF+PTFE+Si	Black	HB/1.6mm	Y
PC-10GF/10T NC048	PC	GF	10	PC+GF+PTFE	Natural	HB/3.2mm	N
PC-20GF/15T FR BLK	PC	GF	20	PC+GF+PTFE FR	Black	V-0/1.5mm	Y
PC-20GF/15T-2S BLK008	PC	GF	20	PC+GF+PTFE+Si	Black	HB/1.6mm	N
AT-10CF/5T BLACK	POM	CF	10	POM+CF+PTFE	Black	HB/1.6mm	Y
AT-000/05T NATURAL	POM	—	—	POM+PTFE	Natural	HB/1.6mm	N
AT-000/15T BLACK	POM	—	—	POM+PTFE	Black	HB/1.6mm	Y
AT-000/18T-2S BLK	POM	—	—	POM+PTFE+Si	Black	HB/1.6mm	Y
AT-30GF/15T BLACK	POM	GF/PTFE	30/15	POM+GF+PTFE	Black	HB/3.2mm	Y
MP-20CF/15T BLK	PPO	CF	20	MPPO+CF+PTFE	Black	HB/1.6mm	Y
MP-20GF/15T BLK	PPO	GF	20	MPPO+GF+PTFE	Black	HB/1.6mm	Y
SF-30CF/15T BLACK	PPS	CF	30	PPS+CF+PTFE	Black	V-1/0.75mm; V-0/3.0mm	Y
SF-30GF/15T BK006	PPS	GF	30	PPS+GF+PTFE	Black	V-0/1.6mm	N
AS-000/15T BK002 ROHS	ABS	—	—	ABS+PTFE	Black	HB/1.6mm	N
LB9800-8001 AR BLACK	PEEK	CF+ Graphite +PTFE	30	PEEK+CF+PTFE+Graphite	Black	V-0/0.8mm	N

HIGH STRENGTH & TEMPERATURE PERFORMANCE

Edgetek™ Engineered Polymer Formulations

Structurally Reinforced Materials

- Improve strength, stiffness, and dimensional stability

High Temperature Formulations

- Retain physical properties and dimensional stability at elevated temperatures
- Based on amorphous and semi-crystalline resins

High Temperature Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL
PK-000/000 Natural	PEEK	—	0	PEEK Unfilled	Natural	V-0/0.75mm	N
PK-30GF/000 BK	PEEK	GF	30	PEEK+GF	Black	V-0/1.6mm	N
PA-50GF/000 BK004	PPA	GF	50	PPA+GF	Black	HB/1.6mm	N
PPA-40GF/000 FRV0 Black	PPA	GF	40	PPA+GF	Black	HB/1.6mm	N
SF-10GF/000 RS BK	PPS	GF	10	PPS+GF	Black	V-0/0.75mm	N
SF-15GF/000 RS BK001	PPS	GF	15	PPS+GF	Black	V-0/0.75mm	Y
SF-20GF/000 RS BK	PPS	GF	20	PPS+GF	Black	V-0/0.75mm	Y
SF-30GF/000 BK003	PPS	GF	30	PPS+GF	Black	V-0/0.75mm	Y
SF-40GF/000 BLACK	PPS	GF	40	PPS+GF	Black	V-0/0.75mm	Y
SF-65GM/000 RS NC	PPS	GF/Mineral	65	PPS+GF+Mineral	Natural	V-0/1.6mm	N

High Strength Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL
AS-000/000 BK079	ABS	—	0	ABS Unfilled	Black	HB/1.6mm	N
AS-10GF/000 BLACK	ABS	GF	10	ABS+GF	Black	HB/1.5mm	Y
AS-20GF/000 BLACK	ABS	GF	20	ABS+GF	Black	HB/1.5mm	Y
AS-000/000 FR BK521	ABS	—	0	ABS Unfilled, FR	Black	V-0/1.6mm	N
PC-10GF/000 BLACK	PC	GF	10	PC+GF	Black	HB/3.2mm	Y
PC-20GF/000 FR BK	PC	GF	20	PC+GF	Black	V-0/3mm,V-2/1.5mm	Y
PC-30GF/000 BLACK	PC	GF	30	PC+GF	Black	V-1/3.0mm	Y
PC-5GF/000 FR BK003	PC	GF	5	PC+GF, FR	Black	V-0/3.2mm	Y
PC-10GF/000 FR V0 BLACK	PC	GF	10	PC+GF, FR	Black	V-1/1.5mm; V-0/3.0mm	Y
PC-30GF/000 FR V0 BK007	PC	GF	30	PC+GF, FR	Black	V-2/0.75mm; V-0/1.5mm	Y
PC-40GF/000 FR V0 BK	PC	GF	40	PC+GF, FR	Black	V-1/1.5mm; V-0/3.0mm	Y
PC-10GF/000 NHFR NCT01	PC	GF	10	PC+GF, NHFR	Natural	V-0/1.5mm	N
PC-20GF/000 NH FRV0 BLK	PC	GF	20	PC+GF, NHFR	Black	V-1/1.0mm; V-0/1.5mm	Y
PC-30GF/000 NH FR 5VA NATURAL	PC	GF	30	PC+GF, NHFR	Black	V-0, 5VA/6.0mm	Y
ET3200-8001 LG	PC	—	0	PC Unfilled, Light Diffusion	Natural	HB/1.6mm	N
C310 BK111	POM	—	0	POM Unfilled	Black	HB/1.6mm	N
AT-10GF/000 BLACK	POM	GF	10	POM+GF	Black	HB/1.6mm	N
AT-20GF/000 BLACK	POM	GF	20	POM+GF	Black	HB/1.6mm	N
AT-30GF/000 NC005 S-ROHS	POM	GF	30	POM+GF	Natural	HB/1.6mm	N
AT-000/000 HI BK066	POM	—	0	POM Unfilled, Impact	Black	HB/1.6mm	N
MP-20GF/000 BLK	PPO	GF	20	MPPO+GF	Black	HB/1.6mm	Y
MP-30GF/000 BLACK	PPO	GF	30	MPPO+GF	Black	HB/1.6mm	Y
NL-20GF/000 BK002	PA612	GF	20	PA612+GF	Black	HB/1.6mm	N
NI-30GF/000 BK002	PA610	GF	30	PA610+GF	Black	HB/1.6mm	N
CY1000 BK193	PCABS	—	0	PC/ABS Unfilled	Black	HB/1.6mm	N
CY1000-20GF/000 BK005	PCABS	GF	20	PC/ABS+GF	Black	HB/1.6mm	N
CY4000 BK006	PCPBT	—	0	PC/PBT	Black	HB/1.0mm	Y
CY8000 BK003	PBTASA	GF	30	PBT/ASA+GF	Black	HB/3.2mm	N
CY8000-20GF/000 NC003	PBTASA	GF	20	PTB/ASA+GF	Natural	HB/3.2mm	N

Dk/Df SERIES

Edgetek™ Formulations for 5G

- Faster design qualification and shorter lead times
- Customizable for Dk and Df values
- Accelerated speed to market
- Design flexibility
- High heat resistance
- Compatible with SMT

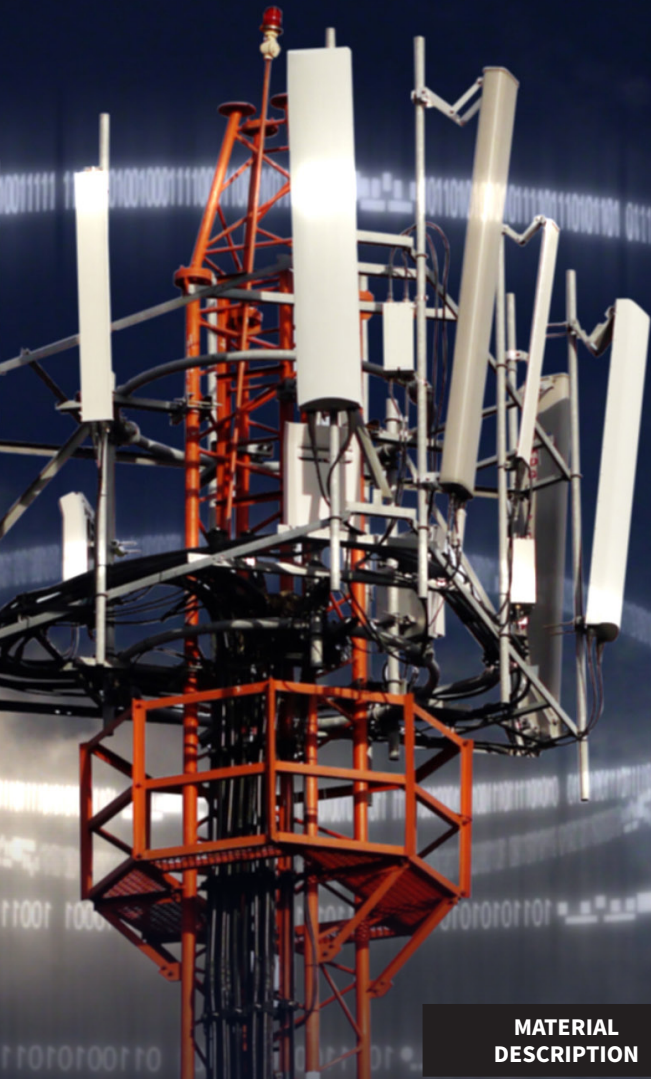
MATERIAL DESCRIPTION	BASE RESIN	Dk (1 GHz)	Df	OTHER FEATURES
ET7600-8027 RS NC001	PPE	3.00	0.0012	—
ET7600-8025 RS NC001	PPE	3.10	0.0012	—
ET7600-8037 RS NC001	PPE	3.35	0.0008	—
ET7600-8019 RS NC001	PPE	3.60	0.0012	—
ET7600-8028 RS NC001	PPE	3.80	0.0012	—
ET7600-8026 RS NC001	PPE	4.40	0.0012	—
ET7600-8044 RS NC001	PPE	4.80	0.0012	—
ET7600-8029 RS NC001	PPE	5.30	0.0007	—
ET7600-8041 RS NC001	PPE	5.50	0.0009	—
ET7600-8048 RS NC001	PPE	6.00	0.0006	—
ET7600-8036 RS NC001	PPE	7.00	0.0005	—
ET7600-8056 RS NC001	PPE	7.00	0.0010	—
ET7600-8031 RS NC001	PPE	9.00	0.0009	—
ET7600-8053 RS NC001	PPE	9.00	0.0009	High flow
ET7600-8064 RS NC001	PPE	10.00	0.0012	—
ET7600-8051 RS NC001	PPE	12.00	0.0009	—
ET7600-8074 RS NC001	PPE	12.00	0.0013	—
ET7600-8057 RS NC001	PPE	18.50	0.0011	—
ET9600-8026 RS BK001	LCP	2.90	0.005	—
ET9600-8029 RS BK001	LCP	3.30	0.005	—
ET9600-8030 RS BK001	LCP	3.50	0.005	—
ET9600-8017 RS NC001	LCP	5.50	0.005	—



3D-MID (MOLDED INTERCONNECT DEVICE) WITH LDS PROCESS

Edgetek™ 3D/LDS Solutions

- Can increase design flexibility especially for circuit design, 3D antenna design, and complex shapes
- Can be customized to specific Dk values and delivered within weeks
- Effective for circuit designs constrained by a limited space
- Can be customized to resist heat, with deflection temperatures ranging from 200°C to 278°C



MATERIAL DESCRIPTION	BASE RESIN	Dk (1 GHz)	Df	WELDING CAPABILITY	OTHER FEATURES
ET9600-8010 LDS BK001	LCP	4.00	0.006	280+°C	—
ET9600-8015 LDS BK001	LCP	3.90	0.004	280+°C	—
ET9600-8018 LDS BK001	LCP	3.44	0.004	280+°C	—
ET9600-8022 LDS BK001	LCP	3.06	0.004	280+°C	—
ET7600-8047 LDS NC001	PPE	2.60	0.002	No (SMT)	—
ET7600-8052 LDS NC001	PPE	4.50	0.004	No (SMT)	—
ET7600-8040 LDS RS NC001	PPE	6.00	0.002	No (SMT)	—
ET7600-8043 LDS RS NC001	PPE	9.00	0.004	No (SMT)	—
ET3200-8205 LDS NHFR BK001	PC	2.84	0.006	No (SMT)	Halogen free FR V0, High impact
ET3200-8285 LDS BK001	PC	2.82	0.005	No (SMT)	High impact
ET3200-8207 LDS BK001	PC	2.84	0.007	No (SMT)	High impact
ET3200-8198 RS LDS BK001	PC	3.10	0.007	No (SMT)	GF reinforced
ET9200-8050 RS LDS NC001	PPS	4.00	0.003	No (SMT)	GF reinforced

LOW LOSS DIELECTRIC THERMOPLASTICS

PREPERM™ Low Loss Thermoplastics

Filled polymer that uniformly
dissipates heat (not insulative)

- Consistent and efficient antenna performance
- Replacement for ceramic materials
- Good temperature and humidity resistance
- Greater design freedom and processing efficiencies
- Good colorability
- Customizable formulations available



MATERIAL DESCRIPTION	BASE RESIN	Dk 2.5GHz)	Df	OTHER FEATURES
RS260	PPE	2.58	0.0009	—
RS260HI	PPE	2.58	0.0010	Impact modified
PPE260	PPE	2.60	0.0005	—
RB260	PPE	2.61	0.0012	Black
RS265FR	PPE	2.65	0.0032	FR V0@1.5mm
PPE300	PPE	3.00	0.0009	—
PPE320	PPE	3.20	0.0010	—
PPE350	PPE	3.50	0.0009	—
PPE350A	PPE	3.50	0.0010	Improved metallization, improved adhesion
PP7600-8038 NHFR RS BK001	PPE	3.80	0.0010	NHFR V0
PPE400	PPE	4.00	0.0009	—
PPE400FR	PPE	4.00	0.0030	FR V0@1.5mm
PPE440	PPE	4.40	0.0009	—
PPE500	PPE	5.00	0.0009	—
PPE500COL	PPE	5.00	0.0010	Purple
PPE650	PPE	6.50	0.0009	—
PPE800	PPE	8.00	0.0009	—
PPE950	PPE	9.50	0.0010	—
PPE1200	PPE	12.00	0.0010	—
H1500HF	PPE	15.00	0.0010	—
LCP580	LCP	5.80	0.0047	—
PP9200-8038 RS BK001	PPS	3.85	0.0030	—
PP9200-8080 RS Natural	PPS	4.00	0.0025	—

POLYOLEFIN-BASED SOLUTIONS

Maxxam™ Polyolefin Formulations

- Custom colors & laser-markable formulations to differentiate end products
- Food-contact compliant grades to mitigate risk and shorten approval processes
- Customized performance characteristics depending on application needs
- Good stiffness, durability, impact resistance and UV stability
- Can be formulated for injection molding, extrusion or blow molding processes
- Applicable to the transportation, industrial, consumer, electrical and electronic, and building and construction industries

Maxxam™ Polyolefin Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL	OTHER FEATURES
TH-218.G001-1277	PP	—	—	PP Unfilled	Natural	HB/1.6mm	N	—
PP10 BK008	PP	GF	30	PP+GF	Black	HB/1.6mm	N	—
PPR 40G BK701	PP	GF	40	PP+GF	Black	HB/1.6mm	N	—
NM-818.H001-8046	PP	GF	20	PP+GF, HS	Black	HB/1.6mm	Y	Chemically Coupled
GV-819.G001-8065	PP	GF	30	PP+GF, Impact	Black	HB/1.6mm	Y	—
PP-40GF/000 Black	PP	GF	40	PP+GF, Impact	Black	HB/1.5mm	Y	—
PP5940 B131C	PP	GF/Mineral	25/15	PP+GF+Mineral	Black	—	N	—
Maxxam F5134T2-4	PP	Talc	20	PP+Mineral, HS	Black	—	N	High Heat Resistance, High Stiffness
PP6 BK067 N (RoHS)	PP	Mineral	20	PP+Mineral, Impact	Natural	HB/1.6mm	N	—
PP8 BK027-AF	PP	Mineral	40	PP+Mineral, Anti-fogging	Black	HB/1.6mm	N	High Heat Resistance, Low Fogging

Maxxam™ FR Flame Retardant Polyolefin Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL	OTHER FEATURES
PP 301 BLK 1284-11 S	PP	—	—	PP Unfilled, FR	Black	V-0/0.75mm	Y	—
QD-813.Y001-1000 RoHS	PP	GF	30	PP+GF, FR	Natural	V-0/1.5mm 5VA/2.0mm	Y	—
QD-813.Y001-1001 (F1)	PP	GF	30	PP+GF, FR	Natural	V-0/1.6mm	N	F1 Compliance
QD-813.Y003-1720	PP	GF	30	PP+GF, FR	Natural	V-0/1.5mm	Y	—
NR-418.Y001-8147	PP	Talc	20	PP+Mineral, FR	Black	V-0/1.6mm	N	—
PP FR 8-6A Natural-RoHS	PP	Talc	15	PP+Mineral, FR, Impact	Natural	V-0/0.75mm 5VA/3.0mm	Y	—

POLYESTER-BASED SOLUTIONS

Bergadur™ Polyester Formulations

Specialty solutions based on polyester and polyester blends

- Custom formulations to address specific requirements, such as pre-colored compounds and reinforced solutions
- Provides excellent dimensional stability that addresses high end applications
- Flame retardant grades include UL-listed and non-halogen solutions



MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL	OTHER FEATURES
PB40 BK029	PBT	—	0	PBT Unfilled	Black	HB/1.6mm	N	—
PBT-GL10 BK008	PBT	GF	10	PBT+GF	Black	HB/1.6mm	N	—
PBT-GL20 BK004	PBT	GF	20	PBT+GF	Black	HB/1.6mm	N	—
PBT-GL30 BK007	PBT	GF	30	PBT+GF	Black	HB/1.6mm	N	—
BR3300-8079 RS LW BK001	PBT	GF	30	PBT+GF	Black	HB/1.6mm	N	Laser Weldable
PB40 G50 BK003	PBT	GF	50	PBT+GF	Black	HB/1.6mm	N	—
BR3300-8065 RS BK001	PBT	GF/GB	35	PBT+GF+GB	Black	HB/1.6mm	N	—
PB40 G/K40 BK016	PBT	GF/GB	40	PBT+GF+GB, HS	Black	HB/1.6mm	N	—
PB40 IM BK041	PBT	—	0	PBT Unfilled, Impact	Black	HB/1.6mm	N	—
PBT-GL10 EM BK008	PBT	GF	10	PBT+GF, Impact	Black	HB/1.6mm	N	—
PB40 G20 BK009	PBT	GF	20	PBT+GF, Impact	Black	HB/1.6mm	N	—
PB40 GB20 TM-X NC044	PBT	GB	20	PBT+GF, Impact	Natural	HB/1.6mm	N	—
PB40 GK30 BK002	PBT	GB	30	PBT+GF, Impact	Black	HB/1.6mm	N	—
PB40 G20 U NC015	PBT	GF	20	PBT+GF, FR	Natural	V-0/1.6mm	N	Chemical Resistant
PB400 G30 UF UV NC063	PBT	GF	30	PBT+GF, NHFR, UV	Natural	V-0/0.8mm	Y	—
PB400 G/C 30 U BK075	PBT	CF+GF	10/20	PBT+CF+GF, FR	Black	V-0/1.6mm	N	ESD Protection

POLYAMIDE SOLUTIONS

Bergamid™ Polymer Formulations

Specialty solutions based on nylon (PA6, PA66 and PA66/6)

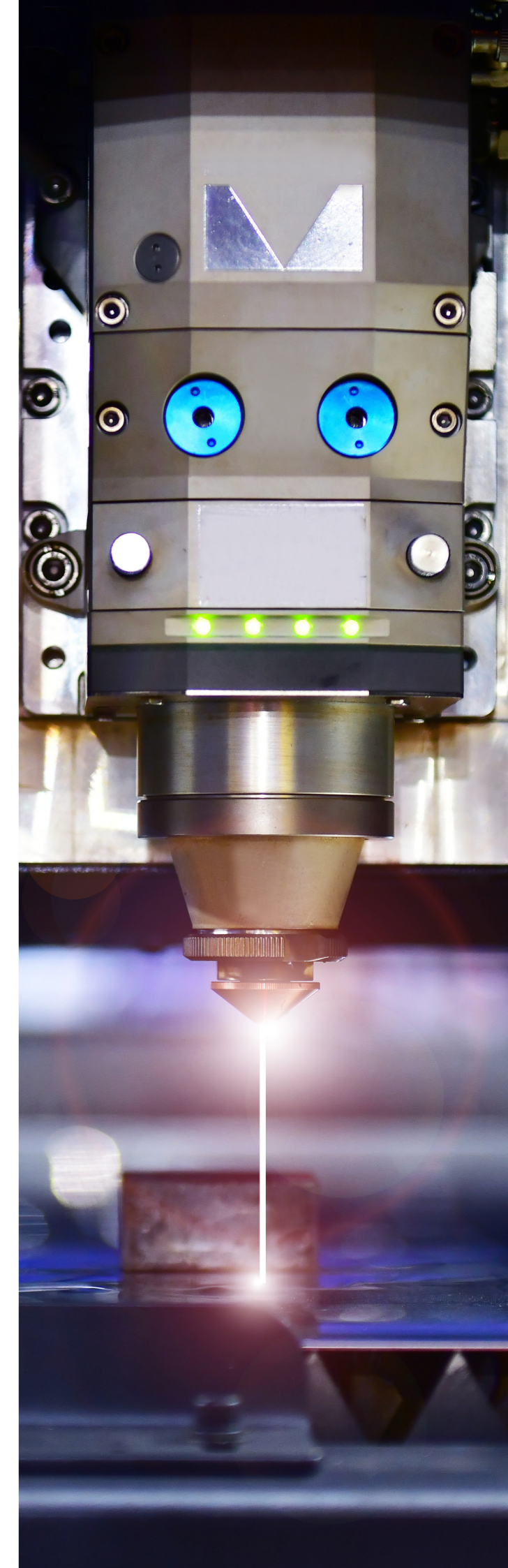
- Standard grades meet a wide variety of performance needs
- Solutions available that address key market needs, such as warpage reduction, increased tensile strength and improved aesthetics
- Flame retardant grades in portfolio including non-halogen solutions

PA6 Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL
B700 BK731	PA6	—	—	PA6 Unfilled	Black	V2	Y
B70 TM-Y BK138	PA6	—	—	PA6 Unfilled, Impact	Black	HB/1.6mm	N
B700 UF NC108	PA6	—	—	PA6 Unfilled, NHFR	Natural	V-0/0.40mm	Y
B70 G15 black	PA6	GF	15	PA6+GF	Black	HB/1.6mm	N
B70 G25 BK017S	PA6	GF	25	PA6+GF	Black	HB/1.6mm	Y
B70 G30 BK	PA6	GF	30	PA6+GF	Black	HB/1.6mm	N
B70 G50 SCHWARZ	PA6	GF	50	PA6+GF	Black	HB/3.2mm	N
B700 G15 H BK041	PA6	GF	15	PA6+GF, HS	Black	HB/1.6mm	Y
GMF600 A20 HS BK053	PA6	GF	20	PA6+GF, HS	Black	HB/1.6mm	N
B700 G30 H BLACK	PA6	GF	30	PA6+GF, HS	Black	HB/0.70mm	Y
B70 G30 TM-Y NC121	PA6	GF	30	PA6+GF, Impact	Natural	HB/1.6mm	Y
B70 G35 NC035	PA6	GF	35	PA6+GF, HS	Natural	HB/1.6mm	Y
B70 G40 H BK039	PA6	GF	40	PA6+GF, HS	Black	HB/1.6mm	Y
B70 G40 H NC046	PA6	GF	40	PA6+GF, HS	Natural	HB/1.6mm	Y
B70 G40 H UV BK043	PA6	GF	40	PA6+GF, HS, UV	Black	HB/1.6mm	Y
B70 G40 TM-X BK023	PA6	GF	40	PA6+GF, Impact	Black	HB/1.6mm	Y
B70 G45 NC042	PA6	GF	45	PA6+GF, HS	Natural	HB/1.6mm	Y
B70 G50 BK055	PA6	GF	50	PA6+GF, HS	Black	HB/1.6mm	Y
B70 G50 H NC057	PA6	GF	50	PA6+GF, HS	Natural	HB/1.6mm	Y
B70 G60 H BK063	PA6	GF	60	PA6+GF, HS	Black	HB/1.6mm	N
B70 G15 TM-Z BLACK	PA6	GF	15	PA6+GF, Impact	Black	HB/1.6mm	N
B700 G35 BLACK TM-Y	PA6	GF	35	PA6+GF, Impact	Black	HB/1.6mm	N
B70 G15 UV NC705	PA6	GF	15	PA6+GF, UV	Natural	HB/1.6mm	N
B70 G15 U-SO BK060	PA6	GF	15	PA6+GF, FR	Black	V-0/3.2mm	N
B700 G20 H UF GREY	PA6	GF	20	PA6+GF, HS, NHFR	Grey	V-0/1.6mm	Y
B70 G/GK30 BK178	PA6	GF/GB	30	PA6+GF+GB	Black	HB/1.6mm	N
B70 GK15 BK012	PA6	GB	15	PA6+GB	Black	HB/1.6mm	N
B70 GK25 BK021	PA6	GB	25	PA6+GB	Black	HB/1.6mm	N
B70 GK30 BK186 ROHS(NEW)	PA6	GB	30	PA6+GB	Black	HB/1.6mm	N
B70 MI40 NC004	PA6	Mineral	40	PA6+Mineral	Natural	HB/1.6mm	N
GMF600 40 BK035	PA6	GF/Mineral	40	PA6+GF+Mineral	Black	HB/1.6mm	N
GMF 604 40 UV BLACK148	PA6	GF/Mineral	40	PA6+GF+Mineral, UV	Black	HB/1.6mm	N
PA6 G/MI20 FR black	PA6	GF/Mineral	20	PA6+GF+Mineral, FR	Black	V-2/1.6mm	N
B70 GK5 MI25 BK705	PA6	GB/Mineral	30	PA6+GB+Mineral	Black	HB/1.6mm	N

PA66 Formulations

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	UL	OTHER FEATURES
A70 BK115	PA66		0	PA66 Unfilled	Black	V-2/1.6mm	N	—
BG6600-8132 LW BK001	PA66		0	PA66 Unfilled	Black	HB/1.6mm	N	Laser weldable
A70 TM-Z BK705	PA66		0	PA66 Unfilled, Impact	Black	HB/1.6mm	N	—
A70 GK30 H NC132	PA66	GB	30	PA66+GB	Natural	HB/1.6mm	N	—
A70 GK30 H NATURAL	PA66	GB	30	PA66+GB, HS	Natural	HB/1.6mm	N	—
A70 G10 H BK032	PA66	GF	10	PA66+GF	Black	HB/1.6mm	N	—
A70 G15 H BK013	PA66	GF	15	PA66+GF	Black	HB/1.6mm	N	—
A70 G20 H BK014	PA66	GF	20	PA66+GF	Black	HB/1.6mm	N	—
A70 G25 H BK709	PA66	GF	25	PA66+GF	Black	HB/1.6mm	N	—
BG6600-8118 RS LW BK001	PA66	GF	30	PA66+GF	Black	HB/1.6mm	N	Laser Weldable
A70 G30 H BK094	PA66	GF	30	PA66+GF	Black	HB/1.6mm	N	—
A70 G33 H NC285	PA66	GF	33	PA66+GF	Natural	HB/1.6mm	N	—
A70 G35 H BK047	PA66	GF	35	PA66+GF	Black	HB/1.6mm	N	—
A70 G40 BK018	PA66	GF	40	PA66+GF	Black	HB/1.6mm	N	—
A70 G50 H BK028	PA66	GF	50	PA66+GF	Black	HB/1.6mm	N	—
A70 G15 TM-Z BK098	PA66	GF	15	PA66+GF, Impact	Black	HB/1.6mm	N	—
A70 G15 HW black TM-Z	PA66	GF	15	PA66+GF HS, Impact	Black	HB/1.6mm	N	—
A70 G20 H TM-X BK708	PA66	GF	20	PA66+GF, Impact	Black	HB/1.6mm	N	—
A70 G30 TM-Y NC144	PA66	GF	30	PA66+GF, Impact	Natural	HB/1.6mm	N	—
A70 G33 TM-X NC281	PA66	GF	33	PA66+GF, Impact	Natural	HB/1.6mm	N	—
A70 G50 TM-X NC029	PA66	GF	50	PA66+GF, Impact	Natural	HB/1.6mm	N	—
A700 G15 H W UF NC059	PA66	GF	15	PA66+GF, NHFR	Natural	V-0/0.40mm	Y	—
A700 G20 H WUF BK702	PA66	GF	20	PA66+GF, NHFR	Black	V-0/1.6mm	Y	—
A700 G25 H WUF BK039	PA66	GF	25	PA66+GF, NHFR	Black	V-0/0.40mm	Y	—
NN-30GF/000 FR V0 BLACK	PA66	GF	30	PA66+GF, NHFR	Black	V-0/1.5mm	Y	—
A70 G35 UF Black SO	PA66	GF	35	PA66+GF, NHFR	Black	V-0/0.80mm	Y	—
A700 G25 U NC047	PA66	GF	25	PA66+GF, FR	Natural	V-0/1.6mm	Y	—
A700 G15 U-S0 BK035	PA66	GF	15	PA66+GF, FR	Black	V-0/3.0mm V-0/1.6mm	Y (3mm) N (1.6mm)	—
A700 G25 U-S0 BK017	PA66	GF	25	PA66+GF, FR	Black	V-0/3.0mm	Y	—
A700 G30 U-S0 BK064	PA66	GF	30	PA66+GF, FR	Black	V-0/3.0mm	N	—
A70 G30 UV BK207	PA66	GF	30	PA66+GF, UV	Black	HB/1.6mm	N	—
A70 G25 MI15 LS BK	PA66	GF/Mineral	40	PA66+GF+Mineral, HS	Black	HB/1.6mm	N	Laser Markable



METAL REPLACEMENT, DENSITY-MODIFIED SOLUTIONS

Gravi-Tech™ Density-Modified Formulations

Customizable, high-density polymer composite that can replace die-cast or machined metal, such as aluminum or lead, for a variety of application requirements and densities

- Improved design freedom which can lead to part consolidation and subsequent cost savings in production
- Material heft which imparts a sense of quality and luxury to improve end user experience
- Easier to process than traditional metals
- Provides the touch and feel experience typical of metal

MATERIAL DESCRIPTION	BASE RESIN	FILLER	COMPOSITION	COLOR
GT6000-8029 GRV NC001	PA6	Metal	PA6+Metal	Natural
GT6000-8028 GRV NC001	PA6	Metal	PA6+Metal	Natural
GT7300-8054 GRV NC001	ABS	Mineral	ABS+Mineral	Natural
GT7300-8050 GRV NC001	ABS	Metal	ABS+Mineral	Natural
GT7300-8062 GRV Grey VN8909CF	ABS	Metal	ABS+Metal	Grey
GT5200-8024 GRV NC001	PP	Metal	PP+Mineral	Natural
GT5200-8025 GRV NC001	PP	Mineral	PP+Mineral	Natural
GT5200-8010 GRV NC001	PP	Mineral	PP+Mineral	Natural
GT3300-8001 GRV WT001	PBT	Mineral	PBT+Mineral	White
GT3300-8002 GRV GY001	PBT	Metal	PBT+Metal	Grey
GT9200-8002 GRV BK001	PPS	Metal	PPS+Metal	Black

THERMALLY CONDUCTIVE SOLUTIONS

Therma-Tech™ Thermally Conductive Formulations

Filled polymer that uniformly dissipates heat (not insulative)

- Facilitates light weighting and increased electrification, leading to lower fuel consumption and CO₂ emissions
- Lowers cost versus cast or machined components
- Reduces assembly costs due to part consolidation
- Extends product life via effective thermal management

MATERIAL DESCRIPTION	BASE RESIN	COLOR	FLAMMABILITY	OTHER FEATURES
TT6000-8713 EI NHFR	PA	Natural	V-0/1.6mm	TC 1.1 EI
TT6000-8711 EI NHFR WHITE	PA	White	V-0/1.6mm	TC 1.0-2.0 EI
TT6600-5001-8 EC GREY	PA	Grey	—	TC 19-21 EC
TT9200-8705 EI BLACK	PPS	Black	V-0	TC 2.0 EI
TT9200-8706 EC Black	PPS	Black	V-0	TC 14-15 EC
TT9200-8707 EC Black	PPS	Black	V-0	TC 15-20 EC
TT9200-8708 EC Black	PPS	Black	V-0	TC 14-15 EC
TT3300-8701 EI FR BK	PBT	Black	V-0/1.6mm	TC 0.9-2.0 EI
TT9200-8012 EC BK001	PPS	Black	—	TC 6-10 EC
TT9200-8015 EC BK001	PPS	Black	—	TC 10-14 EC

LONG FIBER REINFORCED SOLUTIONS

OnForce™ Long Glass Fiber Reinforced Polypropylene Composites & Complet™ Long Fiber Reinforced Structural Thermoplastics

Thermoplastics reinforced with long carbon,
glass or specialty fibers

- High strength-to-weight ratio enables metal replacement to achieve weight reduction
- Consolidates parts to simplify manufacturing
- Uses less energy for transport (due to weight reduction)
- Allows designers to integrate fasteners and other features



MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR
OnForce™ LFT PP-30LGF/001 NATURAL	PP	LGF	30	PP+LGF	Natural
OnForce™ LFT PP-30LGF/001 BLACK UV	PP	LGF	30	PP+LGF	Black
OnForce™ LFT PP-40LGF/001 NATURAL	PP	LGF	40	PP+LGF	Natural
OnForce™ LFT PP-40LGF/001 BLACK UV	PP	LGF	40	PP+LGF	Black
OnForce™ LFT NN-30LGF/000 HS NATURAL	PA66	LGF	30	PA66+LGF	Natural
OnForce™ LFT NN-30LGF/000 HS UV BLACK	PA66	LGF	30	PA66+LGF	Black
OnForce™ LFT NN-40LGF/000 HS NATURAL	PA66	LGF	40	PA66+LGF	Natural
OnForce™ LFT NN-40LGF/000 HS UV BLACK	PA66	LGF	40	PA66+LGF	Black
OnForce™ LFT NN-50LGF/000 HS NATURAL	PA66	LGF	50	PA66+LGF	Natural
OnForce™ LFT NN-50LGF/000 HS UV BLACK	PA66	LGF	50	PA66+LGF	Black
OnForce™ LFT NN-60LGF/000 HS NATURAL	PA66	LGF	60	PA66+LGF	Natural
OnForce™ LFT NN-60LGF/000 HS UV BLACK	PA66	LGF	60	PA66+LGF	Black
Complet™ LCF40-TPU-5 1000 GRY	TPU	LCF	40	—	Grey
Complet™ LCF15-PBT-5 3000 BLK	PBT	LCF	15	—	Black
Complet™ LCF40-PEI-5 1000GRY	PEI	LCF	40	—	Grey
Complet™ LGF50-PARA-5 NHFR 1000 NAT	PARA	LGF	50	—	Natural
Complet™ LCG40-PA66-5 1000 GRY	PA66	LCF/LGF	40	—	Grey

HEALTHCARE THERMOPLASTICS

Trilliant™ HC Healthcare Thermoplastics

- Chemically resistant replacement for FR PC/ABS, FR PC/PET & FR COPE, providing UL 94 Yellow Card V-0 flame rating at 1.5 mm, V-1 at 0.75 mm thicknesses for a broad color spectrum
- Outperforms PC/ABS, PC/PET and COPE in resistance to common disinfectants
- Retains tensile strength after 72-hour exposure to common hospital disinfectants, and shows better long-term chemical resistance as compared to PC blends and COPE
- Exhibits good impact and temperature resistance
- Custom pre-color formulations support product differentiation in the healthcare industry
- Applications include medical device housings, MRI, X-ray, CT scanner components, surgical instruments such as staplers, dissectors, scissors, auto-injector pens

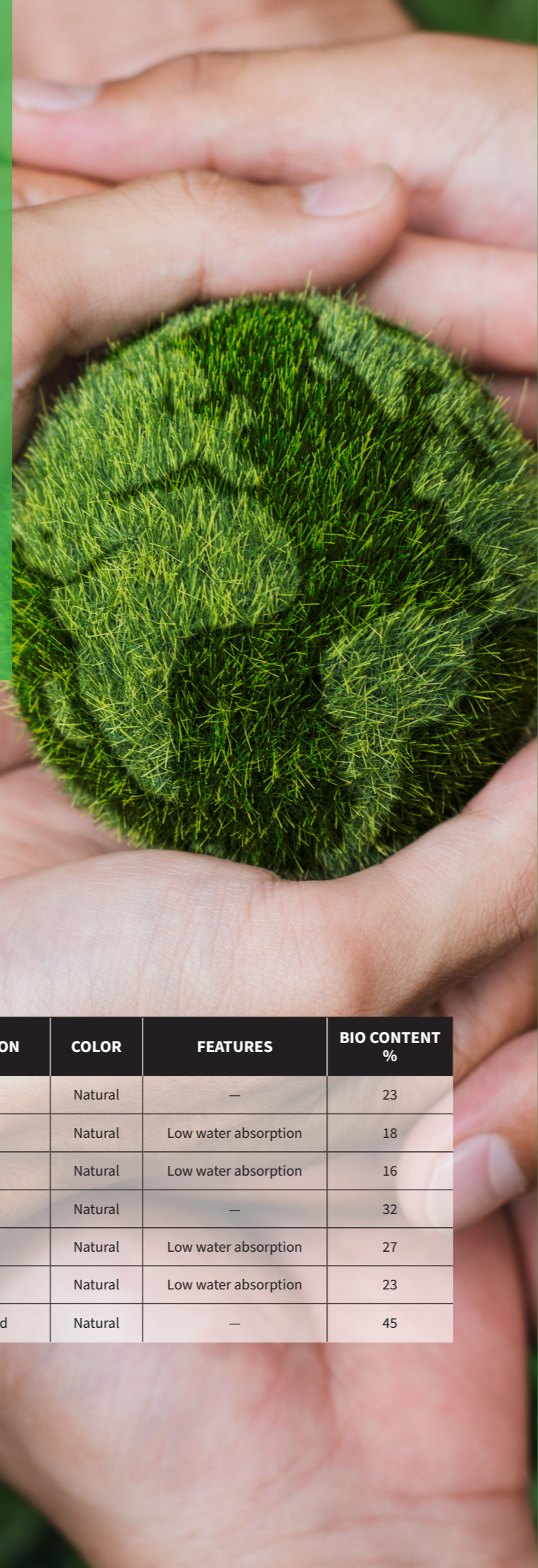
MATERIAL DESCRIPTION	BASE RESIN
HC2020	Copolyester
HC8910/8920	Polyketone/ ABS blend
HC2120	Tritan
HC3120	PC
HC5210	PP
HC6010	PA6
HC6610	PA66
GRV-NP-110-W	PA12



BIO-BASED AND RECYCLED POLYAMIDE SOLUTIONS

Nymax™ Bio-based Polyamide Solutions

- Achieves equivalent performance to PA66 glass fiber-filled formulations using bio-based material to reduce carbon footprint
- Delivers excellent dimension stability and property retention rate after water uptake
- Offers lower warpage plus excellent surface appearance and colorability compared with PA66 glass fiber-filled materials
- Provides a cost-effective option to PA66 glass fiber-reinforced materials



MATERIAL DESCRIPTION	FILLER	FILLER %	COMPOSITION	COLOR	FEATURES	BIO CONTENT %
NM5600-8004 RS NC001	GF	50	PA56+GF	Natural	—	23
NM5600-8005 RS LWA NC001	GF	50	PA56+GF	Natural	Low water absorption	18
NM5600-8006 RS LWA NC001	GF	50	PA56+GF	Natural	Low water absorption	16
NM5600-8002 RS NC001	GF	30	PA56+GF	Natural	—	32
NM5600-8003 RS LWA NC001	GF	30	PA56+GF	Natural	Low water absorption	27
NM5600-8007 RS LWA NC001	GF	30	PA56+GF	Natural	Low water absorption	23
NM5600-8001 NC001	Unfilled	0	PA56 Unfilled	Natural	—	45

Recycled Formulations

- Enhances value of end-products
- Appeals to eco-conscious consumers
- Offers performance comparable to virgin engineering materials
- Reduces carbon emissions
- PCR or PIR solutions available

MATERIAL DESCRIPTION	BASE RESIN	FILLER	FILLER %	COMPOSITION	COLOR	FLAMMABILITY	RECYCLE TYPE	RECYCLE CONTENT %	OTHER FEATURES
ET3200-8254 C NC030	PC	Unfilled	0	PCR PC Unfilled	Transparent	—	PCR	30	—
ET3200-8233 RS C BK035	PC	GF	10	PCR PC + GF	Black	—	PCR	35	—
ET3200-8235 RS C BK030	PC	GF	20	PCR PC + GF	Black	—	PCR	30	—
ET3200-8237 RS FR C BK025	PC	GF	30	PCR PC + GF	Black	V0 1.5	PCR	25	FR
ET3200-8234 RS C BK070	PC	GF	10	PCR PC + GF	Black	—	PCR	70	—
ET3200-8236 RS C BK060	PC	GF	20	PCR PC + GF	Black	—	PCR	60	—
ET3200-8238 RS FR C BK050	PC	GF	30	PCR PC + GF	Black	V0 1.5	PCR	50	FR
ET3200-8239 RS I BK035	PC	GF	10	PIR PC + GF	Black	—	PIR	35	—
ET3200-8241 RS I BK030	PC	GF	20	PIR PC + GF	Black	—	PIR	30	—
ET3200-8243 RS FR I BK025	PC	GF	30	PIR PC + GF	Black	V0 1.5	PIR	25	FR
ET3200-8240 RS I BK070	PC	GF	10	PIR PC + GF	Black	—	PIR	70	—
ET3200-8242 RS I BK060	PC	GF	20	PIR PC + GF	Black	—	PIR	60	—
ET3200-8244 RS FR I BK050	PC	GF	30	PIR PC + GF	Black	V0 1.5	PIR	50	FR
ET3200-8252 RS NHFR C BK035	PC	GF	20	PCR PC + GF	Black	V0 0.6	PCR	35	NHFR
MX5200-8151 C NC050	PP	Unfilled	0	PCR PP Unfilled	Natural	—	PCR	50	—
MX5200-8175 FD C NC100	PP	Unfilled	0	PCR PP Unfilled	Natural	—	PCR	99	FDA
ST6000-8028 ESD BK001	PA6	CF	30	PA6 + PIR CF	Black	—	PIR	30	—
BG6000-8129 RS IC BK100	PA6	CF	15	PIR PA6 + PIR CF	Black	—	PIR	99	—
ET7300-8118 C BK085	ABS	Unfilled	0	—	Black	—	PCR	85	—
ET7300-8113 C BK070	ABS	Unfilled	0	—	Black	—	PCR	70	—
BR3400-8007 RS BK075	PET	GF	15	—	Black	—	PCR	75	—
BR3400-8010 RS NHFR C BK050	PET	GF	33	—	Black	—	PCR	50	NHFR
BG6600-8180 HS RS I BK050	PA66	GF	30	—	Black	—	PIR	50	—
BG6000-8130 RS I BK065	PA66	GF	30	—	Black	—	PIR	65	—
MX5200-8153 RS C NC050	PP	GF	30	PCR PP+ GF	Natural	—	PCR	50	—
MX5200-8186 RS C NC050	PP	GF	40	PCR PP+ GF	Natural	—	PCR	50	—

SOFT-TOUCH & EASILY PROCESSED THERMOPLASTIC ELASTOMERS (TPEs)

Soft-touch elastomers that create good tactile qualities and ergonomics can be used in a wide range of applications

- TPEs can be overmolded onto a rigid substrate to enhance performance and ergonomics
- Good weather resistance, enhanced flexibility and durability
- Good sealing performance
- Available in FDA-compliant and medical grades
- Easily processed and colored
- Applications include outdoor equipment grips, utility items and tools, sealing and gaskets, cooking utensils such as measuring cups and rolling pins, and personal hygiene products such as toothbrushes and razors



MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	COMPRESSION SET/23C, 22H	COMPLIANCE
Dynalloy™ GP 7810 series	20–80A	Translucent	PP	0.87	21%(60A)	FDA
Dynalloy™ GP 7820 series	30–80A	Natural	PP	1	—	FDA
Dynaflex™ G7600 series	30–90A	Natural/Black	PP	1.18	12%(50A)	FDA
Versaflex™ OM 9130	30A	Translucent	PC/ABS	0.90	35%	FDA
Versaflex™ OM 9140	40A	Translucent	PC/ABS	0.90	35%	FDA
Versaflex™ OM 9150	50A	Translucent	PC/ABS	0.91	38%	FDA
Versaflex™ OM 9240	40A	Clear	PC/ABS	0.90	—	FDA
Versaflex™ OM 1040X	40A	Translucent	PC/ABS	0.92	22%	Medical
Versaflex™ OM 3060	60A	Clear	PC/ABS	0.9	33%	Medical,UL
Versaflex™ OM 1060X	60A	Natural/Black	PC/ABS	0.93	29%	UL
Versaflex™ GP 3630-45	45A	Natural	PC/ABS	1.05	—	—
Versaflex™ GP 3630-55	55A	Natural/Black	PC/ABS	1.05	—	UL
Versaflex™ OM 9-802-CL	40A	Translucent	POM/PC/ABS	0.92	20%	UL
Versaflex™ OM 9-801	47A	Natural	POM/PC/ABS	1.04	43%	UL

LOW ODOR, VOC & FOGGING TPEs

Thermoplastic elastomers that reduce volatile organic compounds (VOCs) and fogging

- Reduces VOCs and fogging in elastomeric materials
- Externally tested to VDA 278 and VDA 270
- Does not require pre-drying or post heating to reduce VOCs
- Easily colored at machine
- Good UV resistance

MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	APPLICATIONS	VDA 270	VDA 278 (VOC) µg/g	VDA 278 (FOG) µg/g	DIN 75201 (FOG) mg
OnFlex™ LO AF7120	45-65 A	Natural/Black	PP	1.15	HVAC Systems Interior Trays	≤ 3.0	97	1131	0.3
OnFlex™ AF 7210	50-90 A	Natural/Black	PP	0.99	Interior Trays Fasteners/Clips	≤ 3.0	147	1081	1.7
OnFlex™ S EH	50-90 A	Natural/Black	PP	1.2	Interior Trays	≤ 3.0	196	1707	1.8

SPECIALTY NYLON OVERMOLDING TPEs

Thermoplastic elastomer formulations overmolded onto various nylon substrates to enhance performance and ergonomics

- Excellent adhesion on various nylon substrates, such as PA6, PA66, PA11/12, reinforced flame retardant nylon
- Easily processed and colored
- Typical applications such as power tools, automotive interiors and home appliances



MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	COMPRESSION SET/23C, 22H	COMPLIANCE
Versaflex™ OM 6240	40A	Natural	Nylon	1.17	22%	—
Versaflex™ OM 6258	60A	Natural/Black	Nylon	1.20	23%	UL
Versaflex™ OM 6460	60A	Natural/Black	Nylon	1.09	—	—
Versaflex™ OM 6275	78A	Natural/Black	Nylon	1.10	25%	—

SUSTAINABLE TPE SOLUTIONS

Materials based on renewable resources rather than petroleum

- Significant (40% to 50%) bio-based content
- Post-industrial recycled (PIR) and post-consumer recycled (PCR) content formulations
- Wide hardness range
- Comparable performance characteristics to standard TPEs
- Easily processed and colored



reSound™ BIO TPEs

MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	BIO-DERIVED CONTENT (%)
5530-55N	55A	Natural	PC, ABS, Copolyester	1.01	40%
5530-65N	65A	Natural	PC, ABS, Copolyester	1.04	40%
5540-30N	30A	Natural	PP	0.87	40%
5540-40N	40A	Natural	PP	0.88	40%
5540-50N	50A	Natural	PP	0.88	40%
5540-60N	60A	Natural	PP	0.87	40%
5540-70N	70A	Natural	PP	0.87	40%
5540-80N	80A	Natural	PP	0.87	40%
5540-90N	90A	Natural	PP	0.88	40%

reSound™ REC Recycled Content TPEs

MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	RECYCLE CONTENT TYPE	RECYCLE CONTENT
DY 7810-801 C	30A	Natural	PP	0.88	PCR	9%
DY 7810-801 C	40A	Natural	PP	0.88	PCR	12%
DY 7810-801 C	50A	Natural	PP	0.88	PCR	15%
DY 7810-801 C	60A	Natural	PP	0.88	PCR	21%
DY 7810-801 C	70A	Natural	PP	0.88	PCR	23%
DY 7810-801 C	80A	Natural	PP	0.88	PCR	30%
DY 7810-801 C	90A	Natural	PP	0.88	PCR	39%
DY 7820-801 C	30A	Natural	PP	0.95	PCR	60%
DY 7820-801 C	40A	Natural	PP	0.94	PCR	60%
DY 7820-801 C	50A	Natural	PP	0.97	PCR	60%
DY 7820-801 C	60A	Natural	PP	0.97	PCR	60%
DY 7820-801 C	70A	Natural	PP	0.99	PCR	60%
DY 7820-801 C	80A	Natural	PP	1.01	PCR	60%
DY 7820-801 C	90A	Natural	PP	1.02	PCR	60%
VX3120-801 I	65A	Natural	PC, ABS, PC/ABS	1.11	PIR	20%
VX3120-802 I	65A	Natural	PC, ABS, PC/ABS	1.1	PIR	40%
VX3120-803 I	65A	Natural	PC, ABS, PC/ABS	1.11	PIR	60%

OUTSTANDING LOOK AND FEEL CHEMICALLY RESISTANT TPEs

TPE provides premium look and feel over a long time period

- Silky touch/feel (soft and smooth)
- Good UV resistance
- Stain, chemical resistance (resistant to sweat, various fluids, etc.)
- Abrasion resistance
- High performance for consumer electronics applications



MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	PROPERTY	KEY CHARACTERISTIC
Versaflex™ CE 3120-65	65A	Natural/Black	PC, ABS, Copolyester	1.15	Soft touch, silky feel and good abrasion performance	Silky feeling
Versaflex™ CE 3130-70	70A	Natural	PC, ABS, Copolyester	1.04	Silky feel, long-term life, excellent abrasion resistance, performed UV and stain resistance, chemical resistance	Non-blooming
Versaflex™ CE 3130-80	80A	Natural	PC, ABS, Copolyester	1.08	Silky feel, good abrasion performance and UV resistance	Non-blooming
Versaflex™ CE 3320-70	70A	Clear	PC, ABS, Copolyester	1.08	Excellent UV resistance, blue jean stain resistance	Super UV resistance, blue jean resistance
Versaflex™ CE 3320-80	80A	Clear	PC, ABS, Copolyester	1.15	Excellent UV resistance, blue jean stain resistance	Excellent UV resistance
Versaflex™ CE 3140-65	65A	Natural	PC, ABS, Copolyester	1.00	Excellent abrasion resistance, chemical resistance, silky feel	5G transparent
Versaflex™ CE 3140-90	90A	Natural	PC, ABS, Copolyester	1.01	Excellent abrasion resistance, chemical resistance, silky feel	5G transparent

VIBRATION DAMPING ELASTOMERS

Thermoplastic elastomers that dampen vibrations via energy transfer

- Excellent vibration damping performance (reduce noise/shaking)
- Adhesion to various plastics PC, PC/ABS, ABS, PP
- Colorable and translucent grades available
- Effective in thin films



MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)
Versaflex™ VDT 4201-35N	35A	Natural	PP	1.00
Versaflex™ VDT 4202-40B	40A	Black	PP	1.00
Versaflex™ VDT 5120-40	40A	Natural	Nylon	1.09
Versaflex™ XP 5130 -65	65A	Natural	PC/ABS	1.03
Versaflex™ CE 3310-80	80A	Clear	PC/ABS	1.15



HEALTHCARE TPEs

Avient has performance-grade materials that are compliant with USP VI, ISO 10993-4 and 10993-5. Formulated without phthalate plasticizers, several of our grades offer high clarity, bond to a variety of substrates and can be customized. Common healthcare applications include medical tubing, gaskets and stoppers, bags, bottles and films.

MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	APPLICATIONS
Versaflex™ HC 2110-35N	34A	Natural	PP/PE	0.89	Resealing, Elastomeric closures for injection
Versaflex™ HC 2110-57B	57A	Black	PP	1.01	Syringe Plungers
Versaflex™ HC MT224	75A	Clear	PP	0.89	Medical tubing
Versaflex™ HC BT218	67A	Translucent	—	0.89	Weldable biopharmaceutical tubing
Versaflex™ CL 2242	43A	Clear	PP	0.89	Overmolding for ergonomics
Versaflex™ CL 2250	50A	Clear	PP	0.89	Overmolding for ergonomics
Versaflex™ OM 1040X	40A	Natural/Black	PC/ABS OM	0.92	Overmolding for ergonomics
Versaflex™ OM 3060	60A	Clear	PC/ABS OM	0.90	Overmolding for ergonomics

FOOD GRADE TPEs

Thermoplastic elastomer suitable for use in contact with food

- Made without bisphenol A (BPA), phthalates, or heavy metals; select grades compliant with FDA, EU10/2011 and China GB4806
- Resists bites and tears; many are tested and safe to use in microwaves and dishwashers
- Can be overmolded to provide a soft touch grip and customized to specific comfort requirements including vibration and noise reduction
- Can be injection molded and overmolded right onto a substrate including PP, ABS, etc.
- Eliminate the need for many secondary operations required for other materials so that results are controlled and consistent



MATERIAL DESCRIPTION	HARDNESS	COLOR	OVERMOLD SUBSTRATE	DENSITY (g/cm ³)	COMPLIANCE		
					FDA	EU	GB
Dynalloy™ FC 3510 series	40-80A	Natural	PETG, ABS, PC	1.04	FDA 177.1210 (Aqueous foods; conditions D-G)	EU 10/2010	GB 4806.6-2016
Dynalloy™ FC 7850 & 7860 series	30-80A	Translucent/Natural	PP	0.88/0.99	Generic FDA	EU 10/2011	GB 4806.6-2016
Versaflex™ CL2242	43A	Clear	PP/PC/ABS	0.89	FDA 177.1210 (All foods; conditions A-H)	N/A	N/A
Versaflex™ CL2250	50A	Clear	PP/PC/ABS	0.89	FDA 177.1210 (Aqueous foods but not over 8% alcohol; conditions B-G. For fatty foods and over 8% alcohol; conditions D-G)	N/A	N/A
Dynaflex™ G2780C	84A	Translucent	PE	0.9	FDA 177.2600 (Aqueous foods; conditions A-H)	N/A	N/A
Versaflex™ FFC 2882-50	50A	Translucent	PP	0.9	FDA 177.2600 (Aqueous foods; conditions A-H)	EU 10/2011	N/A
Versaflex™ FFC 2882-70	70A	Translucent	PP	0.88	FDA 177.2600 (Aqueous foods; conditions A-H)	EU 10/2011	GB 4806.6-2016
Versaflex™ FFC 2882-87	87A	Translucent	PP	0.88	FDA 177.2600 (Aqueous foods; conditions A-H)	EU 10/2011	GB 4806.6-2016
Versaflex™ FFC 3882-70	70A	Natural	PETG, ABS, PC	1.1	FDA 177.2600 (Aqueous foods; conditions A-H)	EU 10/2011	
Versaflex™ OM 9100 Series	30-50A	Translucent	PC/ABS	0.9	FDA 177.1210	N/A	N/A







To learn more about Specialty Engineered Materials, contact Avient at +86 (0) 21 6028 4888
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