



PolyOne[™]

**Engineered
Thermoplastic
Compounds**

Innovative Solutions

PolyOne provides standard and custom-formulated high-performance engineered materials utilizing a broad range of thermoplastic and thermoplastic elastomer resins combined with the latest in polymer additive, reinforcement, filler and colorant technologies. We utilize the experience, diversity and commitment of our personnel in collaboration with our customers to deliver innovative compound solutions with demonstrable value. Our solutions include:

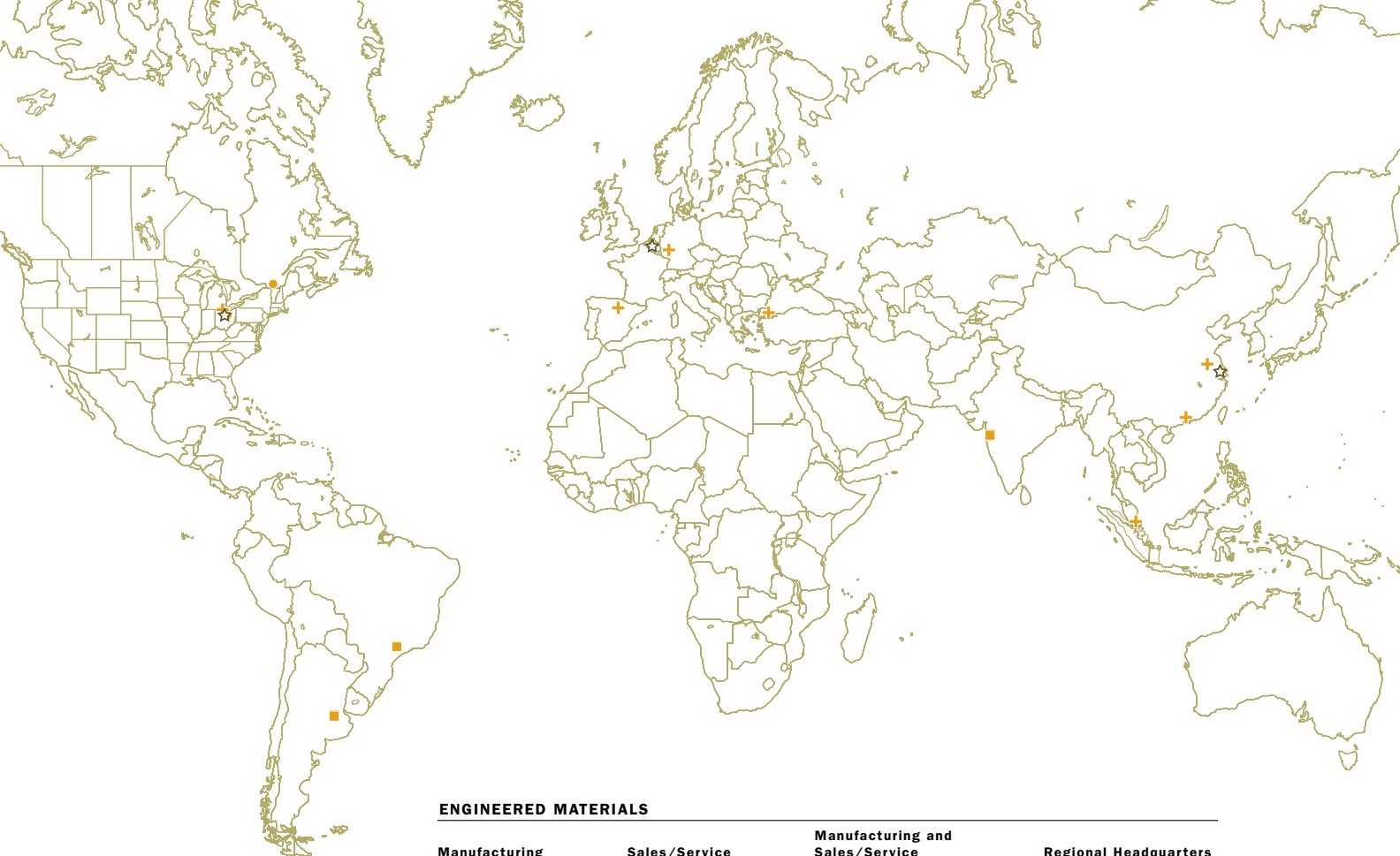
- **General Purpose Nylon & Polyolefin Compounds**
- **Low Smoke and Fume, Zero Halogen (LSFOH) Compounds**
- **High Performance & Specialty Engineering Thermoplastic Compounds**
- **Thermoplastic Elastomers**
- **Wire & Cable Products**

Product Name	Base Resin(s)	Portfolio/Product Scope
High Performance & Specialty Engineering Thermoplastic Compounds		
Bergadur™	PBT	• High strength • Good toughness • Good creep rupture strength • Good chemical and heat resistance • Low friction and good abrasion resistance • High dimensional stability • Good electrical properties • Good flow
ECCOH™	Low smoke and fume, zero halogen (LSFOH)	• Low smoke, low toxicity • Zero halogen • Wire & cable, pipe & fittings
Edgetek™	Acetal, Nylon, LCP, PPA, PEEK, PC, PC/PSU, PES, PEI, PPS, PSU	• High modulus/high strength reinforcements - glass and carbon fiber • Flame-retardant grades - UL 94 V-0, 5Va • Injection molding, extrusion, blow molding • Custom formulations
Edgetek™ XT	PC/PBT PC/PET	• Strength and durability • Chemical resistance • Low temperature impact • Weatherable / UV resistance • Custom formulations
Edgetek™ Lubricated	Acetal, Nylon, PC, PBT, PEEK, PP, PPA, PPS, PS, PEI	• Lubricant additives - silicone, PTFE, molybdenum disulfide • Reinforcements - glass fiber, carbon fiber, aramid fiber • Injection molding, extrusion • Custom formulations
Gravi-Tech™	PA, TPU	• High specific gravity - up to 11.0 • Injection molding, extrusion
Nanoblend™ Compounds	PP	• Light, stiff, tough • Surface quality/gloss improvement • Improved barrier to gas, chemicals and vapors
PETAL™ PET	PET	• Good impact properties • High heat resistance • Heat distortion temperature (HDT) above 200°C for glass-filled grades • High chemical resistance to oils and greases • High gloss level
Stat-Tech™	ABS, Nylon, PP, PEEK, PPA, PES, PC, PC/ABS, PC/PSU, PEI	• Reinforcements/additives - carbon powder, carbon fiber, nickel-coated carbon fiber, stainless steel fiber • Injection molding, extrusion • Custom formulations
Therma-Tech™	Nylon, LCP, PEEK, PP, PPS, PPA	• High thermal conductivity grades • Electrically conductive grades • Injection molding, extrusion • Dielectric grades

Product Name	Base Resin(s)	Portfolio/Product Scope
General Purpose Nylon & Polyolefin Specialty Compounds		
Bergamid™; Nymax™	Nylon 6, 6/6, 12	- Glass fiber reinforced, mineral filled; combination mineral/glass reinforced - Toughened grades - medium and high impact - Optional additives - heat stabilized; lubricated, impact modified - Standard grades - natural; black - Custom formulations available
Maxbatch™	Polypropylene Polyethylene	- Mineral masterbatches - Up to 75% filler levels
Maxxam™	Polypropylene	- Mineral filled, glass fiber reinforced - Homopolymer and copolymer grades - Optional additives - UV; heat stabilizers - Standard grades - natural; black - Custom formulations available
Maxxam™FR	Polypropylene Polyethylene	- Flame-retardant compounds to meet UL 94 V2; V-0; 5Va ratings - Flame-retardant masterbatches - Elevated RTI ratings to 115°C - Injection molding, extrusion, blow molding

Specialty Wire & Cable Products		
ECCOH™	Low smoke and fume, zero halogen (LSFOH)	- Low smoke, low toxicity - Zero halogen
Syncure™	Cross-linked polyethylene (XLPE)	- Temperature resistance - Creep resistance - Stress crack resistance - Abrasion resistance

Thermoplastic Elastomers		
Bergaflex™		- Good UV, ozone and weather resistance - Good chemical resistance to acids, bases, detergents - Low permanent set (elasticity) in a wide temperature range - Wide use temperature (-70°C to 120°C) - Wide hardness range (5 SHA to 60 SHD) - Colorable with concentrates or as pre-color compound - Recyclable FastMark™ laser-markable grades 2-shot molding or co-extrusion onto difficult thermoplastic components (e.g. PA, ABS, PC, PS, PMMA) - Grades suitable for food contact available
OnFlex-O™ Series; Elastamax™ EG	TPO (TPE-O)	- PP/POE - Rheology modified - Improved low-shear melt strength - Excellent extrusion processing
OnFlex-O™ Series; Elastamax™ HTE	PVC/NBR	- PVC/nitrile rubber - Hardness range - (55A-90A) - Hydrocarbon & oil resistance - Weatherable
OnFlex-O™ Series; Elastamax™ XL	TPO (TPE-O)	- PP/EPDM - Weatherable - Hardness range (55A-40D) - Molding/extrusion grades
OnFlex-S™ Series; Synprene™	SBC (TPE-S)	- SBS, SEBS, SEPS - Broad hardness range - (0A - 60D) - FDA-compliant grades - Weatherable grades - Flame-retardant grades - (UL 94 V-0) - Over-molding grades
OnFlex-U™ Series	TPU (TPE-U)	- Excellent abrasion resistance - Retains flexibility at low temperatures - Good tensile strength - High resistance to cut & tear - Improved resistance to oil and hydrolysis - Halogen-free flame-retardant grades available
OnFlex-V™ Series	TPV (TPE-V)	- PP/X-linked EPDM - Improved compression set - Elevated service temperature capability - Improved chemical resistance - Weatherable grades - Custom formulations



ENGINEERED MATERIALS

Manufacturing	Sales/Service	Manufacturing and Sales/Service	Regional Headquarters
●	■	+	☆

Product choices often vary by region due to differences in regulatory and agency requirements, availability and other key factors. Please contact your nearest sales office for assistance in choosing the right solution for your locale.

ENGINEERED MATERIALS CONTACT INFORMATION

Americas

U.S. – Avon Lake, Ohio
+1 440 930 1000
Argentina – Buenos Aires
+0054 11 4200 5917
Brasil – Campinas
+55 19 3206 0561

Asia

China – Shanghai
+86 (0) 21 5080 1188
China – Shenzhen
+86 (0) 755 2969 2888
China – Suzhou
+86 (0) 512 6823 24 38
India – Mumbai
+91 9820 194 220
Singapore
+65 (0) 6861 9325

Europe

Belgium – Assesse
+32 (0) 83 660 2111
Germany – Gaggenau
+49 (0) 7225 6802 0
Spain – Barbastro
+34 (0) 9 7431 0314
Turkey – Istanbul
+90 (0) 212 549 2256

PolyOne

Beyond Polymers.
Better Business Solutions.™

www.polyone.com

PolyOne Americas

33587 Walker Road
Avon Lake, Ohio 44012
United States
+1 440 930 1000
1 866 POLYONE

PolyOne Asia

Guoshoujing Road No. 88
Z.J Hi-Tech Park, Pudong
Shanghai, 201203, China
+86 (0) 21 5080 1188

PolyOne Europe

Rue Melville Wilson 2
5330 Assesse, Belgium
+32 (0) 83 660 211

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