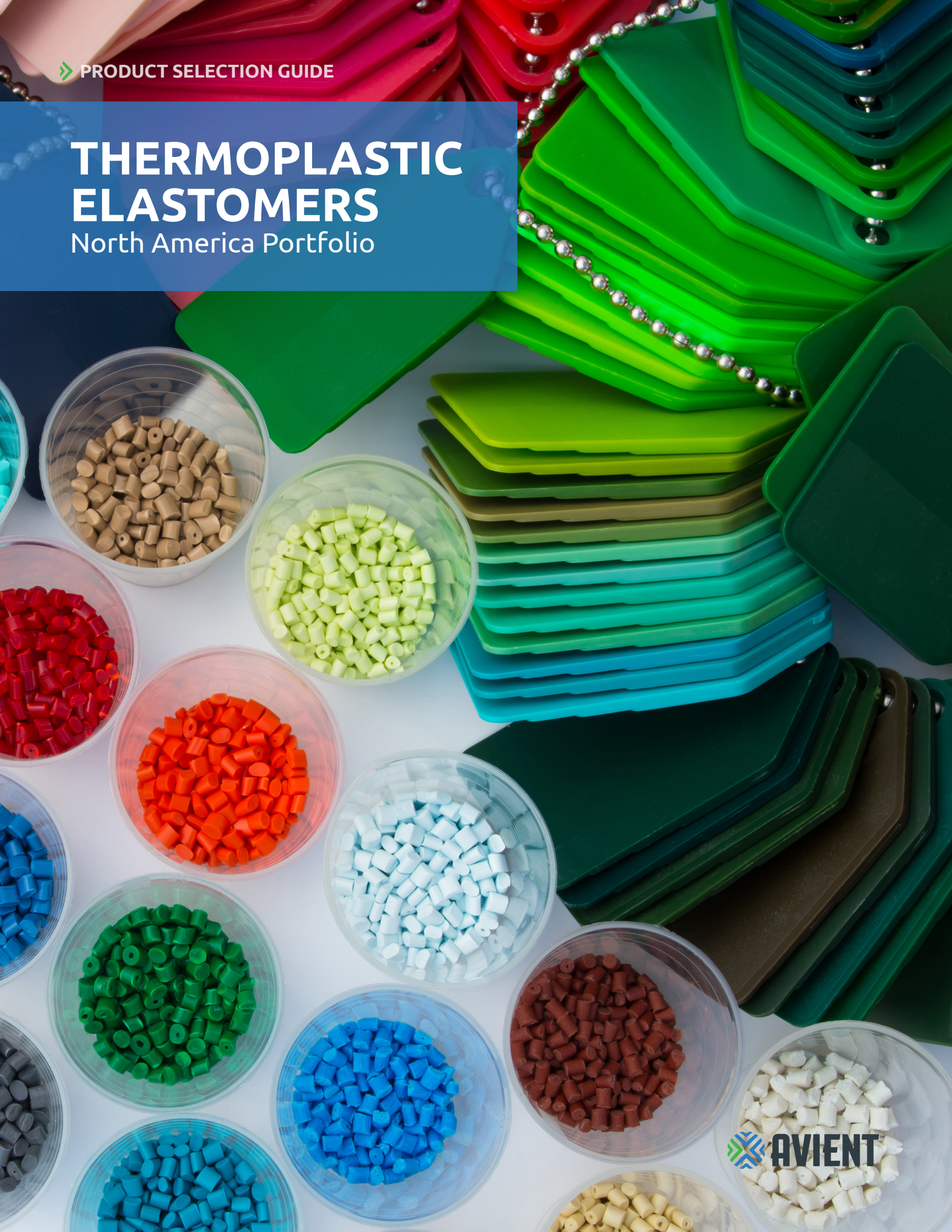
PRODUCT SELECTION GUIDE

THERMOPLASTIC ELASTOMERS

North America Portfolio



AVIENT

Avient's specialty thermoplastic elastomers (TPEs) are formulated to meet countless performance, application and aesthetic demands. This guide provides a representative sampling of the portfolio available in North America, highlighting select grades for the consumer, healthcare and transportation markets. Backed by decades of TPE expertise, our team can help you choose the best polymer for your product or customize a material to meet your specific challenges.

FEATURED TPES FOR CONSUMER APPLICATIONS

	GENERAL PROPERTIES			REGULATORY		OVERMOLDING	PROCESS		FEATURES
	Appearance	Hardness	Specific Gravity	Food Contact	UL 94	Suitable Substrates	Injection	Extrusion	
		ASTM (Shore)	ASTM (D792)						
reSound™ REC Recycled Content Series									
VX2800-9003 C	Natural	47A	0.94	-	-	PP	✔	-	25% post-consumer recycled (PCR) content (PVB from windshields and laminated glass); 1.77 cradle-to-gate product carbon footprint (PCF)
VX2800-9004 C	Natural	54A	0.95	-	-	PP	✔	-	25% PCR content (PVB from windshields and laminated glass)
VX2800-0001 I	Black	65A	0.89	-	-	PP	✔	-	25% post-industrial recycled (PIR) content
VX2800-0001 I	Natural	65A	0.89	-	-	PP	✔	-	25% PIR content
VX2800-0001 C	Black	65A	0.89	-	-	PP	✔	-	25% PCR content (ocean plastics)
VX2800-0002 I	Black	65A	0.88	-	-	PP	✔	-	40% PIR content
VX2800-0003 C	Gray	65A	0.88	✔	-	PP	✔	-	25% PCR/PIR content (food packaging) with application specific FDA rating
VX0100-0001 AR I	Black	79A	1.05	-	-	PC, ABS, PC/ABS	✔	-	30% PIR content
reSound™ BIO Bio-based Series									
RS7900-0001 30N	Natural	31A	1.00	-	-	PP	✔	-	35% bio-derived content (Gen 1 biomass)
RS7900-0001 45N	Natural	48A	1.11	-	-	PP	✔	-	35% bio-derived content (Gen 1 biomass)
RS7900-0001 60N	Natural	59A	1.11	-	-	PP	✔	-	35% bio-derived content (Gen 1 biomass)
RS7900-0001 70N	Natural	69A	1.09	-	-	PP	✔	-	35% bio-derived content (Gen 1 biomass)
RS2800-0001 30N	Natural	33A	0.85	-	-	PP	✔	-	50–60% bio-derived content (Gen 1 biomass)
RS2800-0001 45N	Natural	49A	0.85	-	-	PP	✔	-	50–60% bio-derived content (Gen 1 biomass)
RS2800-0001 60N	Natural	63A	0.87	-	-	PP	✔	-	50–60% bio-derived content (Gen 1 biomass)
RS2800-0001 70N	Natural	71A	0.86	-	-	PP	✔	-	50–60% bio-derived content (Gen 1 biomass)
reSound™ Ultra-Low Carbon Footprint Series									
RS0200-9001 80	Natural	80A	0.87	-	-	PP, LDPE	✔	-	-0.40 cradle-to-gate PCF
RS0200-9001 60	Natural	60A	0.86	-	-	PP, LDPE	✔	-	-0.03 cradle-to-gate PCF

FEATURED TPES FOR CONSUMER APPLICATIONS

	GENERAL PROPERTIES			REGULATORY		OVERMOLDING	PROCESS		FEATURES
	Appearance	Hardness	Specific Gravity	Food Contact	UL 94	Suitable Substrates	Injection	Extrusion	
		ASTM Shore	ASTM (D792)						
Consumer Electronics Series									
Versaflex™ CE 3120-40	Natural	42A	0.92	-	-	PC, ABS, PC/ABS, COPE	✔	-	Good compression set—ideal for device cases or electronic grips
Versaflex™ CE 3120-65	Natural	66A	1.15	-	HB	PC, ABS, PC/ABS, COPE	✔	-	Chemical and abrasion resistant; 4.69 cradle-to-gate PCF—ideal for device cases or electronic grips
Versaflex™ CE 3140-65N	Natural	65A	1.00	-	-	PC, ABS, PC/ABS, COPE	✔	-	5G transparent materials—ideal for device cases or gaskets
Versaflex™ CE 3140-90N	Natural	90A	1.01	-	-	PC, ABS, PC/ABS, COPE	✔	-	5G transparent materials—ideal for device cases or gaskets
Versaflex™ CE 3620	Black/ Natural	65A	1.00	-	HB	PC, ABS, PC/ABS, COPE	✔	-	Chemical and abrasion resistant, hydrolitically stable—ideal for electronic grips/gaskets or wearables
Engineering Resin Overmolds									
Versaflex™ OM 1060X-1	Natural	60A	0.93	✔	-	PC, ABS, PC/ABS	✔	-	Versatile OM resin—ideal for grips/gaskets
Versaflex™ OM 9-801N	Natural	47A	1.04	✔	HB	PC, ABS, PC/ABS, PPO, POM, COPE, PMMA, HIPS	✔	-	Soft touch/rubber feel—ideal for grips/gaskets
Versaflex™ OM 9-802CL	Clear	40A	0.92	✔	-	PC, ABS, PC/ABS, COPE	✔	-	Soft touch/rubber feel—ideal for grips/gaskets
Versaflex™ OM 6059-9	Black	58A	1.10	-	HB	PA 6 and 6,6	✔	-	Superior adhesion—ideal for grips, power tools/equipment
Versaflex™ OM 6160-1	Black/ Natural	60A	1.11	✔	HB	PA 6 and 6,6	✔		Superior adhesion—ideal for grips, power tools/equipment
Versaflex™ OM 6240-1	Natural	43A	1.09	-	-	PA 6 and 6,6	✔	-	Superior adhesion — ideal for grips, power tools/equipment
Versaflex™ OM 6258-1	Natural	62A	1.09	-	-	PA 6 and 6,6	✔	-	Superior adhesion—ideal for grips, power tools/equipment
Versaflex™ OM 6258-9	Black	62A	1.09	-	HB	PA 6 and 6,6	✔	-	Superior adhesion—ideal for grips, power tools/equipment
Versaflex™ OM 6275-9	Black	75A	1.10	-	-	PA 6 and 6,6	✔	-	Superior adhesion—ideal for grips, power tools/equipment
Versollan™ OM1255NX	Black	59A	1.05	-	HB	PC, ABS, PC/ABS, PC/PBT, COPE	✔	-	Superior adhesion—ideal for power tool grips
Versollan™ RU 2205-1	Natural	65A	1.16	-	HB	PC, ABS, PC/ABS, COPE	✔	✔	High performance, rubber feel

FEATURED TPES FOR CONSUMER APPLICATIONS

	GENERAL PROPERTIES			REGULATORY		OVERMOLDING	PROCESS		FEATURES
	Appearance	Hardness	Specific Gravity	Food Contact	UL 94	Suitable Substrates	Injection	Extrusion	
		ASTM Shore	ASTM (D792)						
Special Series									
Versaflex™ VDT 4202-40B	Black	40A	1.00	-	-	PP	✔	✔	Vibration dispersion—ideal for washer/dryer feet or shin guards
Versaflex™ G2800-17	Pink	18 OO	0.85	-	-	-	✔	-	Skin-like feel—ideal for adult toys
Versaflex™ SP 2820-55N	Natural	55A	0.91	✔	-	-	✔	✔	Superior puncture and tear resistance—ideal for dog toys
Versaflex™ XP 2850	Natural	55A	0.88	✔	-	-	✔	✔	Wet grip—ideal for water sports or grips
Versaflex™ GP 2810-40N AM US	Translucent	45A	0.87	✔	-	-	✔	-	Antimicrobial
Versaflex™ CE 3120-65 AM	Natural	67A	1.15	-	-	PC, ABS, PC/ABS, COPE	✔	-	Antimicrobial for consumer electronics
Versalloy™ XL 9045-1	Natural	44A	0.88	✔	-	-	✔	-	Excellent flow for long, thin flow paths—ideal for grips or thin wall parts
Versalloy™ XL 9055-1	Natural	53A	0.89	✔	-	PP	✔	-	Excellent flow for long, thin flow paths—ideal for grips or thin wall parts
Versalloy™ XL 9055X-9	Black	53A	0.89	✔	HB	PP	✔	-	Excellent flow for long, thin flow paths—ideal for grips or thin wall parts
Versalloy™ XL 9070-1	Natural	70A	0.89	✔	-	PP	✔	-	Excellent flow for long, thin flow paths—ideal for grips or thin wall parts
Versalloy™ XL 9070X-9	Black	70A	0.89	✔	HB	PP	✔	-	Excellent flow for long, thin flow paths; 2.54 cradle-to-gate PCF—ideal for grips or thin wall parts
Dynaflex™ G7702-9001-02	Black	37A	1.10	-	-	PP	✔	✔	High temperature performance—ideal for seals and gaskets
Dynalloy™ DT 7910W	White	45A	0.93	✔	-	-	✔	✔	Low compression—ideal for dairy tubing
Versaflex™ CL 2000X	Clear	3A	0.87	✔	-	-	✔	✔	Ultra soft
Versaflex™ CL 2003X	Clear	33 OO	0.87	✔	-	-	✔	✔	Gel feel
Versaflex™ CL30	Clear	30A	0.89	✔	-	PP	✔	✔	High clarity, high tackiness
Versaflex™ CL40	Clear	43A	0.89	✔	HB	-	✔	✔	High clarity, high tackiness
General Purpose Series									
Versaflex™ GP 2810	Translucent	20A–60A	0.88	✔	-	-	✔	✔	Unfilled
Versaflex™ GP 2810	Translucent	70A–90A	0.89	✔	HB	-	✔	✔	Unfilled
Dynaflex™ G7920	Natural/Black	20A	1.01	✔	-	PP	✔	✔	Filled
Dynaflex™ G7900	Natural/Black	30A–90A	1.05–1.20	✔	HB	PP	✔	✔	Filled

FEATURED TPES FOR HEALTHCARE APPLICATIONS

	GENERAL PROPERTIES					REGULATORY				OVERMOLDING	PROCESS		FEATURES
	Appearance	Hardness	Specific Gravity	Compression Set @ 23°C	Compression Set @ 100°C	Food Contact	ISO 10993	USP VI	UL 94	Suitable Substrates	Injection	Extrusion	
		ASTM Shore A	ASTM (D792)	ASTM %	ASTM %								
Tubing													
Versaflex™ G2705 N	Translucent	60	0.89	20	-	✔	✔	✔	✔	PP	✔	✔	High resiliance, low compression set, and good puncture sealing–ideal for medical and biopharma tubing
Versaflex™ HC BT218	Translucent	67	0.89	19	69	-	✔	✔	✔	-	-	✔	Weldable and kink resistant—ideal for biopharma tubing
Versalfex™ HC BIO BT218	Translucent	70	0.88	18	58	-	✔	✔	-	-	-	✔	Weldable and kink resistant; 40% bio-derived content (Gen 1 biomass)—ideal for biopharma tubing
Versaflex™ HC MT317	Translucent	68	0.89	17	69	-	✔	✔	✔	-	-	✔	Flexible and kink resistant, high service temperature —ideal for medical and biopharma tubing
Versalloy™ HC 9220-70	Natural	70	0.95	17	51	-	✔	✔	-	PP	✔	✔	High temperature resistance—ideal for peristaltic pump tubing
Syringe Components													
Versaflex™ HC 2110-35N	Natural	35	0.89	19	47	-	✔	✔	-	LDPE, PP	✔	-	Good puncture sealing and elevated temperature performance—ideal for septums
Versaflex™ HC 2110-57B	Black	57	1.01	20	37	-	✔	✔	-	-	✔	-	Low coefficient of friction and elevated temperature performance—ideal for plungers and stoppers
Engineering Resin Overmolds													
Versaflex™ OM 1040X-1	Translucent	42	0.92	22	-	✔	✔	✔	-	PC, ABS, PC/ABS	✔	-	Good compression set at room temperature—ideal for seals and grips
Versaflex™ OM 3060-1	Clear	59	0.90	33	-	✔	✔	✔	HB	PC, ABS, PC/ABS, PC/PETG, PC/PBT	✔	-	Good compression set at room temperature and UV stability—ideal for seals and grips
Versaflex™ OM 8940X-1	Clear	40	0.92	20	-	✔	✔	-	-	PK, COPE, PC, ABS, PC/ABS	✔	-	Excellent chemical resistance to alcohols and disenfectants—ideal for grips on medical devices
Versaflex™ OM 4052	Translucent	56	1.01	27	-	✔	-	-	-	PC, ABS, PC/ABS	✔	-	Excellent chemical resistance to skin oils, like sebum, and hand lotion—ideal for consumer healthcare applications
Versaflex™ OM 4063	Translucent	64	1.12	30	-	✔	-	-		PC, ABS, PC/ABS	✔	-	Excellent chemical resistance to skin oils, like sebum, and hand lotion—ideal for consumer healthcare applications
General Purpose Applications													
Versaflex™ CL E85	Clear	85	0.90	20	72	✔	✔	✔	-	-	-	✔	High clarity without plasticizers—ideal for extrusion
Versaflex™ HC 3810 Series	Translucent	20–90	0.88	16	54	-	✔	-	-	-	✔	-	Formulated without animal derivatives, excellent colorability—ideal for seals and labware
Versaflex™ G2705 N	Translucent	60	0.89	20	-	✔	✔	✔	-	PP	✔	✔	High resiliance, low compression set, and good puncture sealing
Versalloy™ HC 9220-70	Natural	70	0.95	17	51	-	✔	-	-	PP	✔	✔	High temperature resistance
Versalloy™ HC 9210 Series	Natural	55 & 70	0.89	20	44	-	-	✔	-	-	✔	-	Formulated without animal derivatives—ideal for injection molding long thin flow paths, smooth surface aesthetics
Versaflex™ CL2242	Clear	43	0.89	23	-	✔	✔	✔	-	-	✔	-	High clarity maintained after boiling cleaning processes
Versaflex™ CL2250	Clear	50	0.89	20	-	✔	✔	✔	-	-	✔	-	High clarity maintained after boiling cleaning processes

FEATURED TPES FOR TRANSPORTATION APPLICATIONS

	GENERAL PROPERTIES							REGULATORY	BONDING	PROCESS		FEATURES
	Appearance	Hardness	Specific Gravity	Weatherability*	VOC	FOG	Odor**	UL 94	Suitable Substrates	Injection	Extrusion	
		ASTM Shore A	ASTM (D792)	Internal QUV 1000hrs (Delta E)	VDA 278 µg/g (ppm)	VDA 278 µg/g (ppm)						
Recycled Content Series												
reSound™ REC OF 7310-80	Black/ Natural (Gray)	80	0.90	0.35	75	379	3 (VDA 270)	-	PP	✔		35% PCR/PIR content (food packaging)—ideal for automotive interior applications
reSound™ REC OF 7310-90	Black/ Natural (Gray)	90	0.91	0.11	160	557	3 (VDA 270)	-	PP	✔		45% PCR/PIR content (food packaging)—ideal for automotive interior applications
General Purpose Series												
OnFlex™ G7705 B	Black	42	1.20	-	-	-	-	-	PP	✔	✔	Easy processing for a wide variety of applications
OnFlex™ G7705 N	Natural	44	1.18	-	-	-	-	-	PP	✔	✔	Easy processing for a wide variety of applications
OnFlex™ G7720 B	Black	57	1.16	0.55	-	-	-	HB	PP	✔	✔	Easy processing for a wide variety of applications
OnFlex™ G7720 N	Natural	55	1.17	3.72	-	-	-	HB	PP	✔	✔	Easy processing for a wide variety of applications
OnFlex™ G7820 N	Natural	92	1.14	-	-	-	-	-	PP	✔	✔	Easy processing for a wide variety of applications
Automotive Fasteners & Interior Components												
OnFlex™ AF 7210 Series	Natural	40–90	1.00	-	-	-	-	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	40	1.00	0.49	113	845	2 (SAE J1351, Dry)	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	50	1.00	0.42	51	762	2 (SAE J1351, Dry)	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	60	1.00	0.21	112	1740	1 (SAE J1351, Dry)	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	70	0.99	0.22	105	1976	3 (SAE J1351, Dry)	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	80	1.00	0.32	74	4459	3 (SAE J1351, Dry)	-	PP	✔	-	Low odor and good UV resistance
OnFlex™ AF 7210	Black	90	1.00	-	-	-	-	-	PP	✔	-	Low odor and good UV resistance
HVAC & Interior Components												
OnFlex™ LO 7120-45N	Natural	45	1.15	3.21	41	521	2 (SAE J1351, Dry)	-	PP	✔	-	Significant reductions in VOCs and fogging compared to traditional TPE technologies
GLS™ TPEs with Antimicrobial Technologies												
OnFlex™ LO 7120-45B AM	Black	45	1.13	0.52	-	-	-	-	PP	✔	-	Imbedded antimicrobial technology

* Values were taken on 3mm plaques following 1000hrs of continious exposure to UVA-340

** Samples were conditioned at 23C at 35% RH for 24 hrs. Prior to testing, the samples were heated to 65C for 30 minutes. Testing is on a scale of 1–10 (low-high odor)

Contact Avient to tap into our expertise and learn more about our specialty TPEs.

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