SELECTION GUIDE

reSound™ REC Recycled Content Thermoplastic Elastomers

Post-industrial and post-consumer recycled TPEs

To help brands reach their sustainability goals, reSound™ REC post-industrial recycled (PIR) and post-consumer recycled (PCR) TPE formulations utilize 9–83% recycled content. reSound REC TPEs can be overmolded onto polypropylene (PP), polycarbonate (PC), acrylonitrile butadiene styrene (ABS) and PC/ABS blends, and are suitable for injection molding.

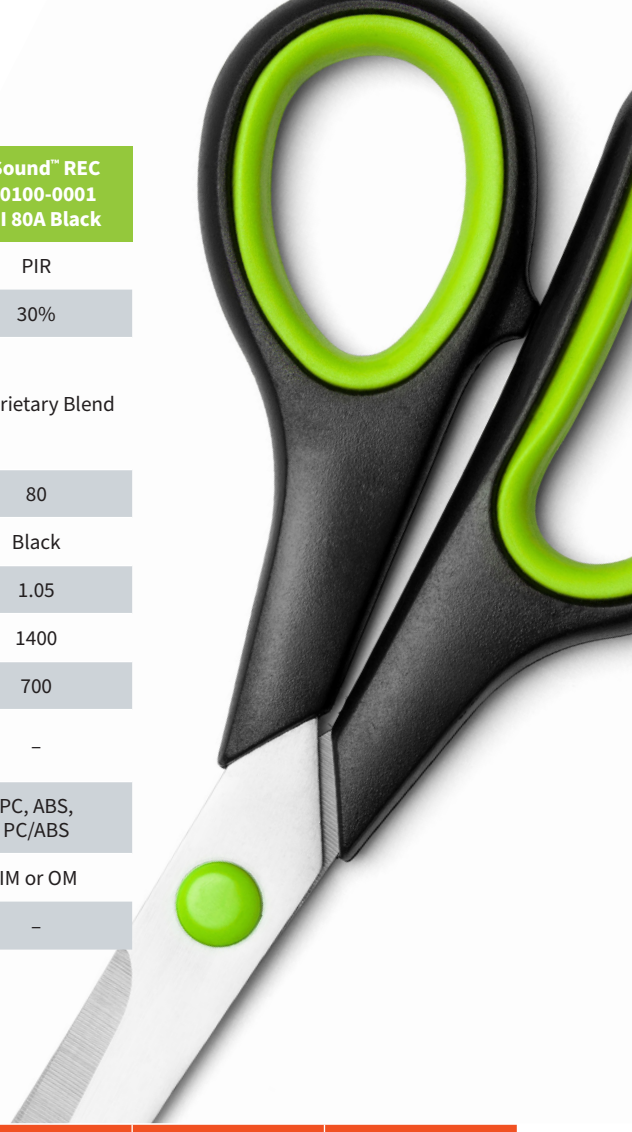
PCR grades are formulated with different types of recycled content: ocean plastics; food packaging from a variety of sources (including material that received a No Objection Letter from the U.S. FDA); oil; or polyvinyl butyral (PVB) from windshields and laminated building glass supplied by Shark Solutions.

Formulated for the consumer and transportation markets, reSound recycled content TPE grades can be used in applications such as personal care products, lawn and garden tools, outdoor goods, office supplies, footwear, houseware durables, consumer electronics, and automotive interior and under-the-hood components.

AVIENT™

NORTH AMERICA GRADES

	reSound™ REC VX2800-0001 I 65A Natural	reSound™ REC VX2800-0001 I 65A Black	reSound™ REC VX2800-0002 I 65A Black	reSound™ REC VX0100-0001 AR I 80A Black
Recycled Content	PIR	PIR	PIR	PIR
Recycled Content, %	25%	25%	40%	30%
Recycled Source	Carpet Backing, Nonwovens, Films, Super Sacks	Carpet Backing, Nonwovens, Films, Super Sacks	Proprietary Blend	Proprietary Blend
Hardness, Shore A	65	65	65	80
Color	Natural	Black	Black	Black
Specific Gravity	0.88	0.89	0.88	1.05
Tensile Strength, PSI	784	788	1023	1400
Elongation at Break, %	687	662	673	700
Compression Set @ Room Temperature	29	27	30	–
OM Substrate	PP	PP	PP	PC, ABS, PC/ABS
Processing	IM or OM	IM or OM	IM or OM	IM or OM
Agency Rating	–	–	–	–



NORTH AMERICA GRADES

	reSound™ REC VX2800-9003 C 47A Natural	reSound™ REC VX2800-9004 C 54A Natural	reSound™ REC VX2800-0001 C 65A Black	reSound™ REC VX2800-0003 C 65 Gray	reSound™ REC OF 7310-80	reSound™ REC OF 7310-90
Recycled Content	PCR	PCR	PCR	PCR/PIR Blend	PCR/PIR Blend	PCR/PIR Blend
Recycled Content, %	25%	25%	25%	25%	35%	45%
Recycled Source	PVB	PVB	Ocean Plastics	Food Packaging	Food Packaging	Food Packaging
Hardness, Shore A	47	54	65	65	80	90
Color	Natural	Natural	Black	Gray	Black/Natural (Gray)	Black/Natural (Gray)
Specific Gravity	0.94	0.95	0.89	0.88	0.9	0.91
Tensile Strength, PSI	250	311	900	831	1120	1590
Elongation at Break, %	585	581	670	620	570	520
Compression Set @ Room Temperature	–	–	25	26	32	37
OM Substrate	PP	PP	PP	PP	PP	PP
Processing	IM or OM	IM or OM	IM or OM	IM or OM	IM	IM
Agency Rating	–	–	–	Application Specific FDA	–	–
Automotive Testing*	–	–	–	–	VOC & FOG (VDA 278), Odor (VDA 270)	VOC & FOG (VDA 278), Odor (VDA 270)

*Additional testing can be performed to confirm specific customer requirements.

EUROPE GRADES

	reSound™ REC VX7900-5001 C I 30A Natural	reSound™ REC VX7900-5001 C I 50A Natural	reSound™ REC VX7900-5001 C I 70A Natural	reSound™ REC VX2800-5032 C 47A Natural	reSound™ REC VX2800-5033 C 54A Natural
Recycled Content	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PCR	PCR
Recycled Content, %	81%	81%	83%	61%	61%
PIR Recycled Source	Proprietary Blend	Proprietary Blend	Proprietary Blend	–	–
PCR Recycled Source	Oil/Filler	Oil/Filler	Oil/Filler	PVB	PVB
Hardness, Shore A	30	50	70	47	54
Color	Natural	Natural	Natural	Natural	Natural
Specific Gravity	1.14	1.16	1.16	0.96	0.96
Tensile Strength, MPa	2.39	3.23	3.35	1.80	2.00
Elongation at Break, %	796	654	515	766	682
Compression Set @ Room Temperature	16	24	37	28	29
OM Substrate	PP	PP	PP	PP	PP
Processing	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM

ASIA GRADES - PIR

	reSound™ REC VX3120-801 I 65A Natural	reSound™ REC VX3120-802 I 65A Natural	reSound™ REC VX3120-803 I 65A Natural
Recycled Content	PIR	PIR	PIR
Recycled Content, %	20%	40%	60%
Recycled Source	Textile Industry	Textile Industry	Textile Industry
Hardness, Shore A	67	68	68
Color	Natural	Natural	Natural
Specific Gravity	1.11	1.10	1.11
Tensile Strength, PSI	1450	1229	1151
Elongation at Break, %	752	709	653
OM Substrate	PC, ABS, PC/ABS	PC, ABS, PC/ABS	PC, ABS, PC/ABS
Processing	IM or OM	IM or OM	IM or OM

ASIA GRADES - PCR

	reSound™ REC DY 7810-801 C 30A Natural	reSound™ REC DY 7810-801 C 40A Natural	reSound™ REC DY 7810-801 C 50A Natural	reSound™ REC DY 7810-801 C 60A Natural	reSound™ REC DY 7810-801 C 70A Natural	reSound™ REC DY 7810-801 C 80A Natural	reSound™ REC DY 7810-801 C 90A Natural	reSound™ REC DY 7820-801 C 30A Natural	reSound™ REC DY 7820-801 C 40A Natural	reSound™ REC DY 7820-801 C 50A Natural	reSound™ REC DY 7820-801 C 60A Natural	reSound™ REC DY 7820-801 C 70A Natural	reSound™ REC DY 7820-801 C 80A Natural	reSound™ REC DY 7820-801 C 90A Natural	reSound™ REC 3630-801C 40N	reSound™ REC 3630-801C 50N	reSound™ REC 3630-801C 60N	reSound™ REC 7850-90N FR
Recycled Content	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR	PCR
Recycled Content, %	9%	12%	15%	21%	23%	30%	39%	60%	60%	60%	60%	60%	60%	60%	45%	45%	45%	32%
Recycled Source	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging, Oil	Food Packaging
Hardness, Shore A	30	40	50	60	70	80	90	30	40	50	60	70	80	90	40	49	58	85
Color	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural	Natural
Specific Gravity	0.88	0.89	0.89	0.88	0.88	0.89	0.89	0.95	0.94	0.97	0.97	0.99	1.01	1.02	0.90	0.90	0.90	1.04
Tensile Strength, PSI	678	889	939	964	1057	1328	1619	663	804	830	859	844	1007	1279	830	965	985	1250
Elongation at Break, %	>1000	983	893	750	726	699	599	1028	948	880	807	681	642	640	700	700	650	310
OM Substrate	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PP	PC, ABS, PC/ABS	PC, ABS, PC/ABS	PC, ABS, PC/ABS	–
Processing	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	IM or OM	EM

1.844.4AVIENT
www.avient.com