



## » 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 recycled content including ocean-bound 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.

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.



### 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
Recycled Content	PCR	PCR	PCR
Recycled Content, %	25%	25%	25%
Recycled Source	Transportation	Transportation	Ocean-bound Plastic
Hardness, Shore A	47	54	65
Color	Natural	Natural	Black
Specific Gravity	0.94	0.95	0.89
Tensile Strength, PSI	250	311	900
Elongation at Break, %	585	581	670
Compression Set @ Room Temperature	-	-	25
OM Substrate	PP	PP	PP
Processing	IM or OM	IM or OM	IM or OM
Agency Rating	-	-	-
Automotive Testing*	-	-	-



### NORTH AMERICA GRADES

	reSound™ REC VX2800-0003 C 65 Gray	reSound™ REC OF 7310-80	reSound™ REC OF 7310-90	reSound™ REC GP 7820-340	reSound™ REC GP 7820-360	reSound™ REC GP 7820-380
Recycled Content	PCR/PIR Blend	PCR/PIR Blend	PCR/PIR Blend	PCR/PIR Blend	PCR/PIR Blend	PCR/PIR Blend
Recycled Content, %	25%	35%	45%	60%	60%	60%
Recycled Source	Food Packaging	Food Packaging	Food Packaging	Transportation, Industrial	Transportation, Industrial	Transportation, Industrial
Hardness, Shore A	65	80	90	36	63	77
Color	Gray	Black/Natural (Gray)	Black/Natural (Gray)	Natural	Natural	Natural
Specific Gravity	0.88	0.9	0.91	0.95	0.98	1.0
Tensile Strength, PSI	831	1120	1590	1027	1012	1173
Elongation at Break, %	620	570	520	1600	1200	1000
Compression Set @ Room Temperature	26	32	37	24	30	39
OM Substrate	PP	PP	PP	PP	PP	PP
Processing	IM or OM	IM	IM	IM	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 AF 7210-140 B	reSound™ REC AF 7210-150 B	reSound™ REC AF 7210-160 B	reSound™ REC AF 7210-170 B	reSound™ REC AF 7210-180 B	reSound™ REC AF 7210-190 B
Recycled Content	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend	PIR/PCR Blend
Recycled Content, %	81%	81%	83%	59%	57%	54%	57%	56%	51%
PIR Recycled Source	Proprietary Blend	Proprietary Blend	Proprietary Blend	Transportation	Transportation	Transportation	Transportation	Transportation	Transportation
PCR Recycled Source	Transportation/ Industrial	Transportation/ Industrial	Transportation/ Industrial	Transportation	Transportation	Transportation	Transportation	Transportation	Transportation
Hardness, Shore A	30	50	70	43	51	61	70	81	90
Color	Natural	Natural	Natural	Black	Black	Black	Black	Black	Black
Specific Gravity	1.14	1.16	1.16	0.97	0.98	0.98	0.98	0.99	0.99
Tensile Strength, MPa	2.39	3.23	3.35	4	5	5	8	10	13
Elongation at Break, %	796	654	515	1013	993	981	935	876	829
Compression Set @ Room Temperature	16	24	37	41	44	44	48	54	55
OM Substrate	PP	PP	PP	PP	PP	PP	PP	PP	PP
Processing	IM or OM	IM or OM	IM or OM	IM	IM	IM	IM	IM	IM



## EUROPE GRADES

	reSound™ REC VX2800-5032 C 47A Natural	reSound™ REC VX2800-5033 C 54A Natural	reSound™ REC GP 7820-140	reSound™ REC GP 7820-160	reSound™ REC GP 7820-180
Recycled Content	PCR	PCR	PCR	PCR	PCR
Recycled Content, %	61%	61%	60%	60%	60%
PCR Recycled Source	Transportation	Transportation	Transportation/ Industrial	Transportation/ Industrial	Transportation/ Industrial
Hardness, Shore A	47	54	38	57	77
Color	Natural	Natural	Natural	Natural	Natural
Specific Gravity	0.96	0.96	0.94	0.97	1.0
Tensile Strength, MPa	1.80	2.00	7.19	6.65	7
Elongation at Break, %	766	682	1590	1380	1010
Compression Set @ Room Temperature	28	29	28	32	38
OM Substrate	PP	PP	PP	PP	PP
Processing	IM or OM	IM or OM	IM	IM	IM

## 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	reSound™ REC GP 7820-240	reSound™ REC GP 7820-260	reSound™ REC GP 7820-280	
Recycled Content	PCR	PCR	PCR	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%	60%	60%	60%	
Recycled Source	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging, Transportation	Food Packaging	Transportation, Industrial	Transportation, Industrial	Transportation, Industrial	
Hardness, Shore A	30	40	50	60	70	80	90	30	40	50	60	70	80	90	40	49	58	85	39	57	80	
Color	Natural	Natural	Natural	Natural	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	0.95	0.98	1.0	
Tensile Strength, PSI	678	889	939	964	1057	1328	1619	663	804	830	859	844	1007	1279	830	965	985	1250	938	1089	1479	
Elongation at Break, %	>1000	983	893	750	726	699	599	1028	948	880	807	681	642	640	700	700	650	310	1600	1360	1090	
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	-	PP	30	39	
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	IM	IM	IM	



1.844.4AVIENT  
www.avient.com



Copyright © 2024, Avient Corporation. Avient makes no representations, guarantees, or warranties of any kind with respect to the information contained in this document about its accuracy, suitability for particular applications, or the results obtained or obtainable using the information. Some of the information arises from laboratory work with small-scale equipment which may not provide a reliable indication of performance or properties obtained or obtainable on larger-scale equipment. Values reported as "typical" or stated without a range do not state minimum or maximum properties; consult your sales representative for property ranges and min/max specifications. Processing conditions can cause material properties to shift from the values stated in the information. Avient makes no warranties or guarantees respecting suitability of either Avient's products or the information for your process or end-use application. You have the responsibility to conduct full-scale end-product performance testing to determine suitability in your application, and you assume all risk and liability arising from your use of the information and/or use or handling of any product. AVIENT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, either with respect to the information or products reflected by the information. This literature shall NOT operate as permission, recommendation, or inducement to practice any patented invention without permission of the patent owner.