

TECHNICAL BULLETIN

reSound™ BIO Thermoplastic Elastomers

Customizable Bio-based TPEs

reSound™ BIO TPEs are formulated utilizing between 35 and 60 percent bio-renewable content. Developed to support growing sustainability goals, these bio-polymers offer hardness levels from 30-70 Shore A and property retention comparable to traditional petroleum-based TPEs.

Initially available in overmolding grades compatible with PP, all grades are formulated to achieve comparable performance to traditional TPEs.

Plus, with an opaque natural color, reSound BIO materials offer excellent colorability, making them ideal for applications such as cosmetics packaging, personal care products, household appliances, and consumer electronics.

Avient can also develop custom bio-based formulations that expand on the initial reSound BIO portfolio. Customization options may include bio-renewable content percentages, hardness, and color. This expertise enables brands to meet sustainability goals while maintaining the mechanical properties of traditional TPEs.

reSound™ BIO 7900 Series

	RS7900-0001 30N	RS7900-0001 45N	RS7900-0001 60N	RS7900-0001 70N
Gen 1 Biomass Content (%)	35%	35%	35%	35%
Hardness, Shore A	30A	45A	60A	70A
Specific Gravity	1.0	1.1	1.1	1.1
50% Modulus, PSI	103	163	212	313
100% Modulus, PSI	127	192	247	355
Tensile Strength, PSI	564	759	920	1115
Elongation, %	699	692	712	727
Tear Strength, PLI	61	86	114	138
OM Substrate	PP	PP	PP	PP

AVIENT™

reSound™ BIO 2800 Series

	RS2800-0001 30N	RS2800-0001 45N	RS2800-0001 60N	RS2800-0001 70N
Gen 1 Biomass Content (%)	50–60%	50–60%	50–60%	50–60%
Hardness, Shore A	30A	45A	60A	70A
Specific Gravity	0.85	0.85	0.87	0.86
50% Modulus, PSI	111	167	256	378
100% Modulus, PSI	137	203	301	430
Tensile Strength, PSI	514	807	1089	1118
Elongation, %	672	735	709	644
Tear Strength, PLI	68	102	144	166
OM Substrate	PP	PP	PP	PP

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