

BioABS – ABS with up to 30% PLA

Patent Status

US provisional
62/023,235 filed

License Status

Available for license

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Opportunity

- Injection molding grade ABS
- Modified ABS with up to 30% biobased content (PLA)
- Competitive materials cost
- Properties are comparable to ABS Magnum

Impact – achieve high impact strength and heat deflection

Moldability – high MFI decreases cycle time and reduced defects



Example	Tens strength (MPa)	Tensile Modulus (GPa)	Elongation at break (%)	Flexural strength (MPa)	Flexural modulus (GPa)	Impact Strength (J/m)
ABS Magnum	35.3	1.9	34.2	57.65	1.99	506.6
15% PLA	40.1	1.62	28.6	60.97	2.03	403.2
25% PLA	44.6	1.65	10.6	68.5	2.20	579.5
26% PLA	41.5	1.7	90.9	62.64	1.88	572.7
28% PLA	42.9	1.73	114	66.19	1.99	448.6

Keywords

- ABS • bioABS • acrylonitrile butadiene styrene • PLA •
- polylactic acid • injection molding •