Public comparison report

PCTG Material Family Comparison

3DPIceland Labs

Generated with 3DPIceland Engineering Platform v60.0.6 WORKFLOW-RELIABILITY - Bug Fixes and Workflow Reliability

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Public-data contract: only explicitly allowlisted MaterialIDs and existing Verified Material Summary scores are included. No measurements or scores are recalculated.

Comparison scope: Stable Material Family preset for PCTG. Every included MaterialID has explicit Public reports opt-in.

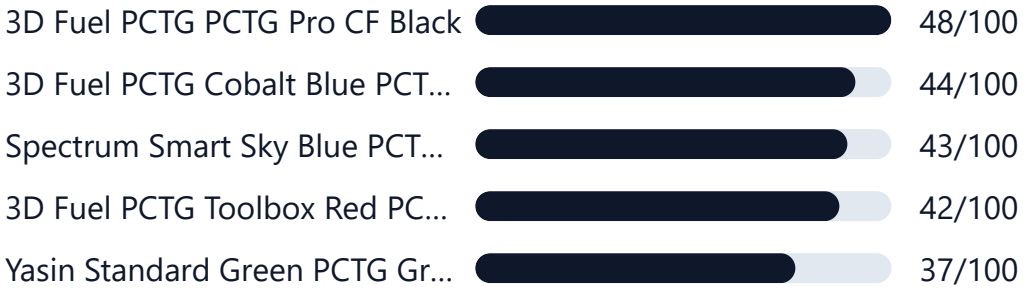
Materials compared	Overall score available	All 6 axes available
5	**5**	**5**

Engineering-axis leaders in this comparison

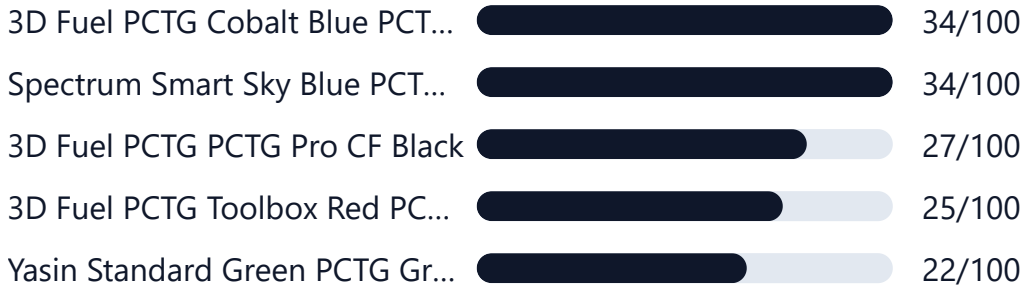
Axis	Leading material	Score
Overall	3D Fuel PCTG PCTG Pro CF Black	48
Tensile	3D Fuel PCTG Cobalt Blue PCTG Pro Blue	34
Impact	3D Fuel PCTG Toolbox Red PCTG Pro GF Red	31
Stiffness	3D Fuel PCTG PCTG Pro CF Black	88
Consistency	3D Fuel PCTG PCTG Pro CF Black	81

Axis	Leading material	Score
Layer adhesion	3D Fuel PCTG Cobalt Blue PCTG Pro Blue	43
Thermal	Yasin Standard Green PCTG Green	39

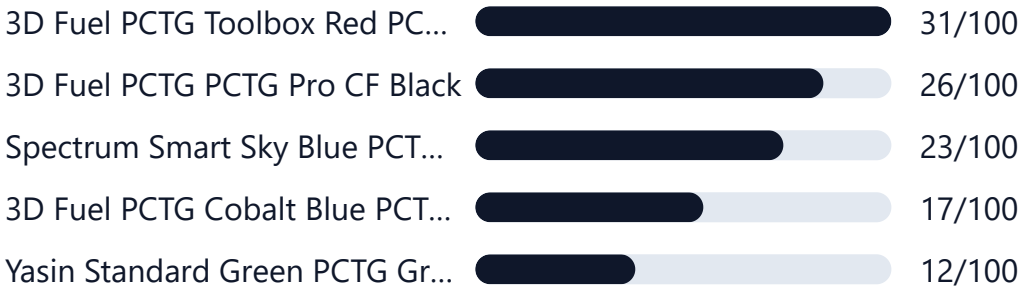
Overall comparison



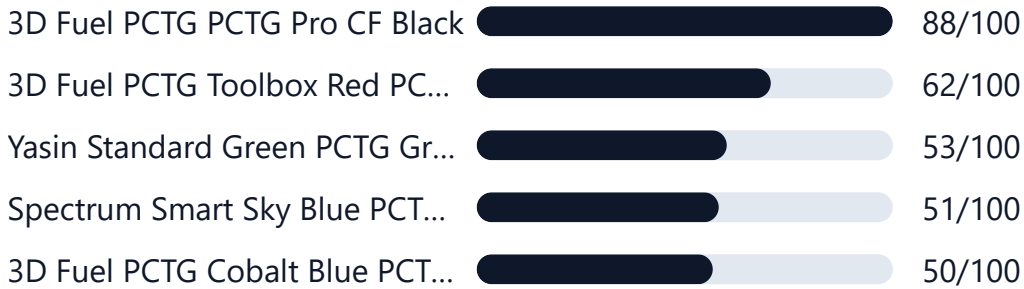
Tensile comparison



Impact comparison



Stiffness comparison



Materials and evidence context

MaterialID	Material	Manufacturer	Product line	Type	Reinforcement	Test coverage	Engineering axes
MAT0039	3D Fuel PCTG PCTG Pro CF Black	3D Fuel	PCTG	PCTG	CF	Complete	6/6
MAT0041	3D Fuel PCTG Cobalt Blue PCTG Pro Blue	3D Fuel	PCTG	PCTG		Complete	6/6
MAT0227	Spectrum Smart Sky Blue PCTG Blue	Spectrum	Smart	PCTG		Complete	6/6
MAT0040	3D Fuel PCTG Toolbox Red PCTG Pro GF Red	3D Fuel	PCTG	PCTG	GF	Complete	6/6
MAT0238	Yasin Standard Green PCTG Green	Yasin	Standard	PCTG		Complete	6/6

Side-by-side engineering scores

MaterialID	Material	Manufacturer	Reinforcement	Coverage	Evidence	Overall	Tensile	Impact	Stiffness	Consistency	Layer adhesion	Thermal	Fixture °C	Method	Thermal limitation	MSRP USD/kg
MAT0039	3D Fuel PCTG PCTG Pro CF Black	3D Fuel	CF	Complete	6/6	48/100	27/100	26/100	88/100	81/100	17/100	33/100	65 °C	3dp-thermal-deflection-fixture-v1	Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.	$54.95
MAT0041	3D Fuel PCTG Cobalt Blue PCTG Pro Blue	3D Fuel		Complete	6/6	44/100	34/100	17/100	50/100	78/100	43/100	33/100	65 °C	3dp-thermal-deflection-fixture-v1	Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.	$29.95
MAT0227	Spectrum Smart Sky Blue PCTG Blue	Spectrum		Complete	6/6	43/100	34/100	23/100	51/100	80/100	26/100	33/100	65 °C	3dp-thermal-deflection-fixture-v1	Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.	$39.92

MaterialID	Material	Manufacturer	Reinforcement	Coverage	Evidence	Overall	Tensile	Impact	Stiffness	Consistency	Layer adhesion	Thermal	Fixture °C	Method	Thermal limitation	MSRP USD/kg
MAT0040	3D Fuel PCTG Toolbox Red PCTG Pro GF Red	3D Fuel	GF	Complete	6/6	42/100	25/100	31/100	62/100	78/100	15/100	34/100	67 °C	3dp-thermal-deflection-fixture-v1	Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.	$59.95
MAT0238	Yasin Standard Green PCTG Green	Yasin		Complete	6/6	37/100	22/100	12/100	53/100	67/100	30/100	39/100	78 °C	3dp-thermal-deflection-fixture-v1	Nearby BlueDOT probe-indicated fixture temperature from a non-standard comparative 3DPIceland method; not ASTM D648, ISO 75, specimen temperature, certified HDT or a manufacturer limit.	$33.44

Results are comparative 3DPIceland measurements and do not replace manufacturer datasheets or accredited laboratory testing.

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