

## **Neo® 3D Printer Featured Materials Overview**

Material Name	Description, Key Benefits	Applications	Category	Color	PP Method	Tensile Strength	Elongation	Flex Modulus	Notched Izod	HDT @ 0.46 MPa	Water Abs Ease of U		of Use
						MPa	%	MPa	J/m	°C	%	<u>Print</u>	<u>Vat</u>
Somos® WaterShed® XC 11122	Good clarity Versatile Good all around resin Dimensionally stable Fast and easy processing	Functional prototypes     Detailed parts with good clarity     Fluid flow analysis, lenses, duct work, manufacturing aids     Jigs and fixtures     Investment casting	•	Clear	UV	50	15.5	2,205	25	50	0.35	***	***
Somos® WaterShed® XC+	<ul> <li>Great clarity</li> <li>Versatile use</li> <li>All around resin</li> <li>Dimensionally stable</li> <li>Low differential shrinkage</li> <li>Fast and easy post processing</li> </ul>	Functional prototypes     Detailed parts with good clarity     Fluid flow analysis, lenses, duct work, manufacturing aids     Investment casting	•	Clear	UV	27 ± 5	12 ± 3	1,950 ± 56	25 ± 5	50 ± 1	0.28 +/- 0.02	***	***
Somos® WaterShed® Black	Weatherable     True black color     Versatile     Dimensionally stable     Easy to process	Functional end-use parts     Functional prototyping     Manufacturing aids     Jigs and fixtures	•	Black	UV	50	15.5	2,205	25	50	0.35	***	***
Somos® 9120™	<ul><li>Memory retention</li><li>Fatigue resistance</li><li>Good for snap fits</li><li>Chemical resistance</li><li>Easy to print and use</li></ul>	Snap fits     Housings     Auto components     Jigs and fixtures	•	Transluscent	UV	31	20	1,380	51	60	-	***	***
Somos® Taurus™	Tough Temperature performance to 90 °C Isotropic Thermoplastic like performance Excellent surface	End use parts     Functional prototypes     Jigs and fixtures	•	Charcoal	UV UV+TPC	47 49	24 17	2,054 1,724	47.5 35.8	62 91	0.7	**	**
Somos® EvoLVe™ 128	High strength and toughness     Fast and accurate printing     Great surface finish	Functional testing     Jigs, fixtures, manufacturing aids     Snap fits     Jigs and fixtures	•	White	UV	56.8	11	2,654	38.9	52	0.4	**	***
Somos® NeXt™	Very tough Tough in high strain rate Stiff and strong Dimensionally stable	Functional testing including for end uses replicating plastics performance     Jigs and manufacturing aids     Sporting goods     Packaging     Snap fits     Jigs and fixtures	•	White	UV	42	9	2,470	50	56	0.4	**	**

Categories: Clear/Transparent ABS-Like PP-like/Flexible Tough/Strong High Temperature/Stiff Application Focused

Print ★★★ User friendly; suitable for new users ★★ Additional processing guidelines and knowledge required ★ Requires experience



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Somos <sup>®</sup> PerFORM™	Very high heat resistance     High strength and rigidity     Excellent detail resolution	Wind tunnel parts     Tooling     High temperature functional prototypes	•	White	UV UV+TPC	68 80	1.1 1.2	10,000 9,030	17 20	132 268	0.1 0.1	**	*
Somos® PerFORM Reflect™	Very high heat resistance High strength and rigidity Excellent detail resolution Ready-to-use for PIV testing	PIV Wind Tunnel Testing Tooling High temperature functional prototypes	•	Orange	UV UV+TPC	63.3 72.4	0.79 0.96	8,273 7,722	16.9 20	94 276	0.19 0.14	**	*
Somos® BioClear™	Biocompatible for general medical applications Meets ISO 10993-5/10 (cytotoxicity, sensitization, irritation) Accurate Great surface quality Solvent and moisture resistant	Anatomical models     Surgical guides     Non-implantable medical devices	•	Clear	UV	50.4	15.5	2,205	25	50	0.35	***	***
Somos® DMX SL™-100	Withstands autoclave process temperatures     Very tough     Good for extreme detail     Mandrels for hollow composite parts	Composites manufacturing mandrel	•	Off White	UV	45	20	2,290	65	44	0.83	*	**
Somos® WaterShed® AF	Accurate for complex investment casting patterns     Low ash     Dimensionally stable     Excellent surface finish     Antimony Free	Investment casting patterns	•	Clear	UV	46	10	2,030	34	50	0.31	***	***
ASTM Test Method		1	1			D638	D638	D790	D256	D648	D570-98		

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Ease of Use: Print ★★★ User friendly; suitable for new users ★★ Additional processing guidelines and knowledge required ★ Requires experience

Vat ★★★ Standard vat maintenance practices ★★ Routine mixing required ★ Routine mixing and additional vat maintenance practices required