

MATERIAL DATA SAFETY SHEET

Issued in Australia by Bilby 3D Pty Ltd.

The attached Material Data Safety Sheet has been prepared by the manufacturer outside Australia.

In accordance with Australia WHS regulations the following Australian contact details apply

Section 1: AUSTRALIAN COMPANY DETAILS

In Australia the product is imported and distributed by: Bilby 3D Pty Ltd Mailing Address : Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208 Head Office Address : Kingsgrove Business Centre, 7/192 Kingsgrove Rd, Kingsgrove NSW 2208 Contact Phone: 1800 847 333

Section 2: AUSTRALIAN EMERGENCY CONTACT

Emergency Contact

In the event of an emergency please contact: Poisons Information Centre 24 hour Telephone Advice Line on 13 11 26

Section 3: AUSTRALIAN ISSUE DATA

Date of Issue : 1 March 2020



Technical Data Sheet: Obsidian™ Carbon Fiber Nylon 3D Filament

Obsidian[™] was developed for use in all Markforged printers as an alternative to Onyx[™]

Physical Properties	Standard	Unit	Obsidian™	Onyx™	
Density	ASTM D792	g/cc	1.2	1.2	
Mechanical Properties	Standard	Unit	Obsidian™	Onyx™	
Tensile Strength, Break	ASTM D638	MPa	44	37	
Tensile Modulus	ASTM D638	GPa	3.5	2.4	
Tensile Elongation, Break	ASTM D638	%	11	25	
Flexural Strength	ASTM D790	MPa	75	71	
Flexural Modulus	ASTM D790	GPa	3.8	3	
Thermal Properties	Standard	Unit	Obsidian™	Onyx™	
Deflection Temperature at 0.45 MPa (66psi)	ASTM D648	°C	147	145	
Electrical Property	Standard	Unit	Obsidian™	Onyx™	
Surface Resistance	ASTM D257	Ohm/sq	>10 ⁹	>10 ⁹	
Printed Specimen Conditions					

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Printer: Markforged Onyx One™		
Layer Height: 0.125mm		
Infill: 100%		
Specimen Orientation: XY Flat		
Onyx [™] data copied from Markforged data sheet		
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