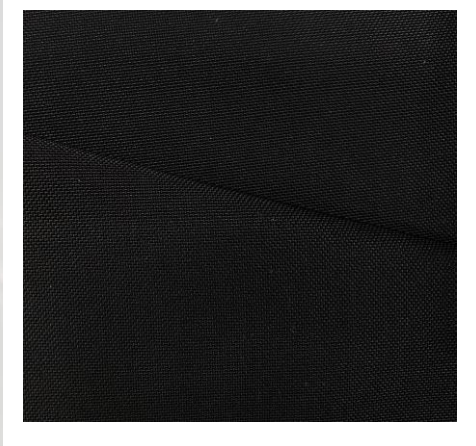


MACKINTOSH® TOPGUN GRANDE

100% Polypropylene
210 gsm | Woven Plain

Fabric Name:	MACKINTOSH® TOPGUN GRANDE
Model:	22Q021-5
Color:	Black
Denier:	225D
Fabric Weight:	210 gsm
Composition:	100% Polypropylene
Width:	60
Weave:	Woven Plain
Application:	Cycling, Camping, and Backpacks: Backpacks, Gear
Warp:	225D DTY
Weft:	225D FDY



Product Characteristics

Test Description	Protocol	Results
Dimensional Stability to Washing	ISO 3759-2011	TBD
Abrasion Resistance	ISO 12947-2	23000
Pilling Resistance	ASTM D4970 ISO 12945-2	4.5 TBD
Tear Strength Warp/Weft	ASTM D2261	27.4lbs/25.3lbs
Color Fastness to Washing	ISO105-C06	4<>5
Color Fastness to Rubbing	ISO105-X12	4<>5
Color Fastness to Light	ISO105-B02	7-8 (800 hours)
Rain Test	AATCC 35	<0.1
Spray Test	AATCC 22	90<>100
Water Repellency	ISO 4920	5
Water Repellency After Wash	ISO 9865/6330	4.5
Hydrostatic Head Pressure (Before/After Wash)	AATCC 127	896 TBD
Hydrostatic Head Pressure (Before/After Wash)	JIS L 1092	TBD TBD
Bundesmann Average Water Absorption	ISO 9865	0.02
Bundesmann Average Visual Grade	ISO 9865	4
Bundesmann Wetting to Underside	ISO 9865	No
Bundesmann Average Penetration	ISO 9865	0

HIGG MSI			CO2 Emissions (CO2e/kg		7.06
Global Warming	Eutrophication	Water Scarcity	Resource Depletion	Chemistry	
8.95	8.95	0.852	11	6.83	