This MotoCAP safety rating applies to:

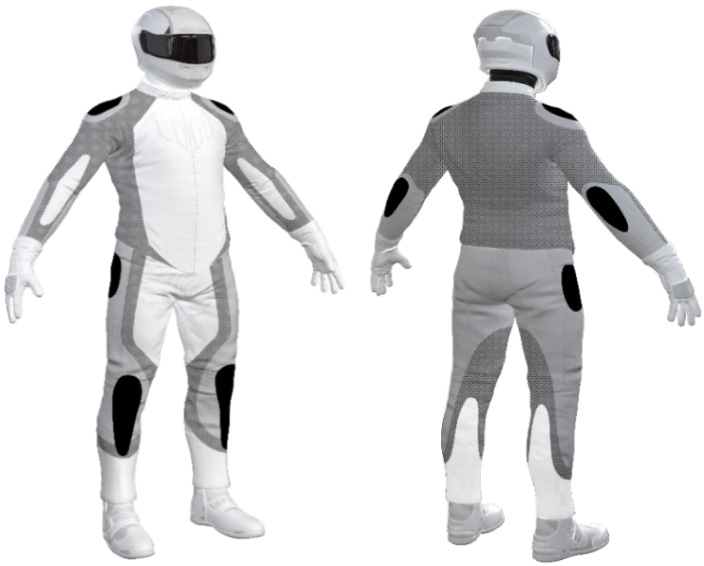
Brand	Motodry
Model	Ladies Kevl-ar Hoody
Type	Jacket - Textile
Date purchased	13 March 2020
Sizes tested	12 and 18
Test garment gender	Female
Style	Streetwear
RRP	$199.95

Test Results Summary	Rating	Score
MotoCAP Protection Rating	★	21.0
Abrasion	1/10	0.79
Burst	9/10	980
Impact	3/10	24.0
MotoCAP Breathability Rating	★	0.208
Moisture Vapour Resistance	-	78.9
Thermal Resistance	-	0.274
Water resistance	N/A	N/A

This garment is fitted with impact protectors for the elbows and shoulders. A pocket is provided for an aftermarket back protector. There are no vents to allow airflow movement through the garment.

Jacket and Pants - Crash Impact Risk Zones

This diagram is a pictorial representation of the crash impact risk Zones.



Removable liners

Thermal liner	☐
Water-resistant liner	☐

Removable impact protection

	Pockets	Armour
Elbow	✓	✓
Shoulder	✓	✓
Back	✓	☐

Zone 1	Zone 2	Zone 3	Zone 4
High risk of abrasion High risk of impact	High risk of abrasion	Medium risk of abrasion	Low risk of abrasion

Abrasion Resistance

The jacket was tested for abrasion resistance in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely abrasion performance of the materials in each zone calculated from the data in the table below. The colour coding is based on the worst performing material in each zone.

Abrasion Resistance Performance	
Abrasion rating	1/10
Abrasion score	0.79

Determining Criteria	Area	Good	Acceptable	Marginal	Poor
High abrasion risk	Zones 1 & 2	> 5.6	3.0 - 5.6	1.3 - 2.9	< 1.3
Medium abrasion risk	Zone 3	> 2.5	1.8 - 2.5	0.8 - 1.7	< 0.8
Low abrasion risk	Zone 4	>1.5	1.0 - 1.5	0.4 - 0.9	< 0.4

Individual Abrasion Resistance Results: - The table below shows the test results for time to abrade through all layers of the materials. Calculated for each sample by Zone, type and area coverage of each material as a proportion of that Zone. Abrasion times are capped at a maximum of 10.00s.

Abrasion time for each test (seconds)

Zones 1 & 2	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	80%	1.35	1.07	0.96	1.51	1.09	1.05	1.17	P
Material B	20%	0.55	0.47	0.29	0.37	0.46	0.45	0.43	P
Zone 3	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material A	90%	1.35	1.07	0.96	1.51	1.09	1.05	1.17	M
Material B	10%	0.55	0.47	0.29	0.37	0.46	0.45	0.43	P
Zone 4	Coverage (%)	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Material B	100%	0.55	0.47	0.29	0.37	0.46	0.45	0.43	M

Details of materials used in jacket

Material A	Knitted fabric shell, aramid fabric layer and fabric inner liner
Material B	Knitted fabric shell with fabric inner liner

Burst Strength

The jacket was tested for burst strength in accordance with MotoCAP test protocols. The diagram below illustrates the burst strength results in terms of the likely performance of the garment in an impact and is a pictorial representation of the data from the table below.

Burst Strength Performance	
Burst rating	9/10
Burst score	980

Determining Criteria	Unit	Good	Acceptable	Marginal	Poor
Burst strength	(kPa)	> 1000	800 - 1000	500 - 799	< 500

Individual Burst Strength Results: - The table below shows the burst pressure in kilopascals (kPA) for each sample tested by Zone and the average result for each zone.

Burst pressure for each seam (kPA)

Area	Sample 1	Sample 2	Sample 3	Sample 4	Sample 5	Sample 6	Average	
Zones 1 & 2	1199	785	1167	1147	780	785	977	A
Zones 3 & 4	942	895	869	1291	1164	781	990	A

Impact Protection

The jacket was tested for impact protection and coverage in accordance with MotoCAP test protocols. The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table below. The colour coding is based on the worst performing score for average or maximium force for each impact zone. Areas shaded black are not considered for impact protection ratings.

Impact Protection Performance	
Impact rating	3/10
Impact score	24.0

Determining Criteria	Unit	Good	Acceptable	Marginal	Poor*
Impact force	(kN)	< 15	15 - 24	25 - 30	> 30

* Poor may also indicate that no impact protector, or impact protector pocket is present in the garment

Impact Protector Results: - The table below shows the average and maximum force transmitted through each impact protector type in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Elbow		Shoulder	
Average force (kN)	26.4	M	24.0	A
Maximum force (kN)	37.0	P	27.6	M
Coverage of Zone 1 area	110%		100%	
Coverage of Zone after displacement	100%		100%	

Individual Impact Protector Results: - The table below shows the test results for each strike on individual impact protectors in kilonewtons (kN) and the position of the strike. Individual strike results are capped at a maximum of 50kN.

Force transfer for each impact strike (kN)

Impact protector type	Elbow			Shoulder		
Strike location	Centre	Mid	Edge	Centre	Mid	Edge
Impact Protector 1	35.1	26.6	28.2	22.3	24.3	25.1
Impact Protector 2	17.8	23.3	24.1	21.4	22.4	23.7
Impact Protector 3	21.2	24.8	37.0	23.1	26.4	27.6

Breathability

The jacket was tested for breathability following the MotoCAP test protocols. The table below shows the moisture vapour resistance and the thermal resistance values obtained.

Without removable liners		With water-resistant liner	
Breathability rating	★	Breathability rating	N/A
Breathability score	0.208	Breathability score	N/A

Moisture Vapour Resistance - R_{et} (kPa.m^2/W)	1	2	Average
Without removable liners	73.3	84.5	78.9
With water-resistant liner	N/A	N/A	N/A

Thermal Resistance - R_{ct} (K.m^2/W)	1	2	Average
Without removable liners	0.274	0.273	0.274
With water-resistant liner	N/A	N/A	N/A

Water spray and rain resistance

This jacket has not been advertised as water-resistant so has not been tested for water spray and rain resistance.

Assessment Details.

Brand	Motodry
Model	Ladies Kevl-ar Hoody
Type	Jacket - Textile
Date purchased	13 March 2020
Tested by	AMCAF, Deakin University
Garment test reference	J19T44
Rating first published	August 2020
Rating updated	24 August 2020