



This MotoCAP safety rating applies to:

Brand: Triumph
Model: Brecon
Type: Pants - Textile
Date purchased: 22 August 2019
Sizes tested: 34 and 36
Gender: M
Style: All Purpose
Test code: P19T06

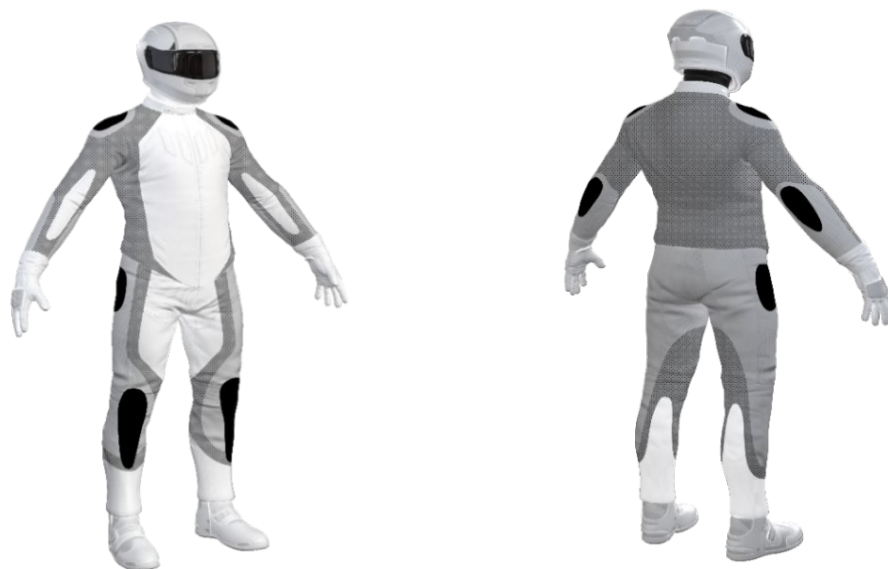
Test Results Summary:

	Rating	Score
MotoCAP Protection Rating	★★	29.8
Abrasion	1/10	0.11
Burst	10/10	1694
Impact	6/10	41.1
MotoCAP Comfort Rating	★★★★	0.603
Moisture Vapour Resistance		16.9
Thermal Resistance		0.170
Water resistance	6/10	9.2

This garment is fitted with impact protectors for the knees and hips. 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.



Zone 1



High risk of abrasion
High risk of impact

Zone 2



High risk of abrasion

Zone 3



Medium risk of abrasion

Zone 4



Low risk of abrasion

Abrasion Resistance

The garment was tested for abrasion resistance in accordance with MotoCAP test protocols. 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.

Details of materials used in garment:

Material A:	Woven fabric shell, water resistant layer, foam layer and mesh inner liner
Material B:	Woven fabric shell, water resistant layer and mesh inner liner

Zone	Coverage (%)	Abrasion time for each test (seconds)						Average (seconds)	
		1	2	3	4	5	6		
Zone 1 and 2 areas (High abrasion risk)									
Material A	55%	1.85	1.88	1.23	1.47	1.29	1.04	1.46	M
Material B	45%	0.23	0.28	0.22	0.29	0.41	0.40	0.31	P
Zone 3 area (Medium abrasion risk)									
Material B	100%	0.23	0.28	0.22	0.29	0.41	0.40	0.31	P
Zone 4 area (Low abrasion risk)									
Material B	100%	0.23	0.28	0.22	0.29	0.41	0.40	0.31	P

Abrasion times are capped at a maximum of 10.00s.

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 above. The colour coding is based on the worst performing material in each zone.



Determining Criteria		Good	Acceptable	Marginal	Poor
High abrasion risk	Zone 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

Burst Strength

The garment's burst strength was tested in accordance with MotoCAP test protocols. 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 (kPa)

Area	1	2	3	4	5	Average	
Zones 1 & 2	1941	1768	1939	1533	1941	1824	G
Zone EZ	1383	1886	1813	1713	1605	1680	G
Zones 3 & 4	1581	1511	1570	1288	1365	1463	G

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 above.



Determining Criteria

Burst strength

	Good	Acceptable	Marginal	Poor
(kPa)	> 1000	800 - 1000	500 - 799	< 500

Impact Protection

The garment was tested for impact protection and coverage in accordance with MotoCAP test protocols. The table below shows the test results for each strike on each impact protector in kilonewtons (kN) and their area of coverage as a proportion (%) of the Zone.

Impact protector type	Knee		Hip	
Average force (kN)	14.3	G	15.2	A
Maximum force (kN)	17.4	A	18.1	A
Coverage of zone 1 area	110%		70%	
Coverage of zone after displacement	80%		70%	

Individual test results

Impact force (kN)	Knee			Hip		
Strike location	A	B	C	A	B	C
Impact Protector 1	14.4	12.5	17.4	14.9	14.3	17.9
Impact Protector 2	15.2	14.4	14.6	12.3	15.0	15.5
Impact Protector 3	14.5	12.5	13.2	14.7	14.5	18.1

The diagram below is a visual indication of the likely performance of each impact protector calculated from the data in the table above. The colour coding is based on the worst performing score for average or maximum force for each impact zone.



Determining Criteria		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

Areas shaded black are not considered in the impact protection ratings.

Thermal comfort

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

	1	2	Average
Moisture Vapour Resistance - R_{et} ($kPam^2/W$)	17.8	16.0	16.9

	1	2	Average
Thermal Resistance - R_{ct} (Km^2/W)	0.173	0.167	0.170

Water spray and rain resistance

This garment is advertised as water-resistant, and so has been tested for water spray and rain resistance according to the MotoCAP test protocols. The table below shows the water absorbed (ml) and the wetting proportion (%) of the garment and undergarments due to water absorption.

	Water absorbed by garment		Water absorbed by underwear	
	Volume (ml)	Percentage (%)	Volume (ml)	Percentage (%)
Garment 1	108	10%	21	8.6%
Garment 2	278	26%	25	9.8%
Average	193	18%	23	9.2%

Location of wetting:

Visible wetting to the cotton underwear worn under the motorcycle water resistant garment was present over the buttocks area of both garments tested.