


This MotoCAP safety rating applies to:

Brand: BMW
Model: GS Dry
Type: Jacket - Textile
Date purchased: 26 August 2019
Sizes tested: 54 and 56
Gender: M
Style: Tourer
Test code: J19T30

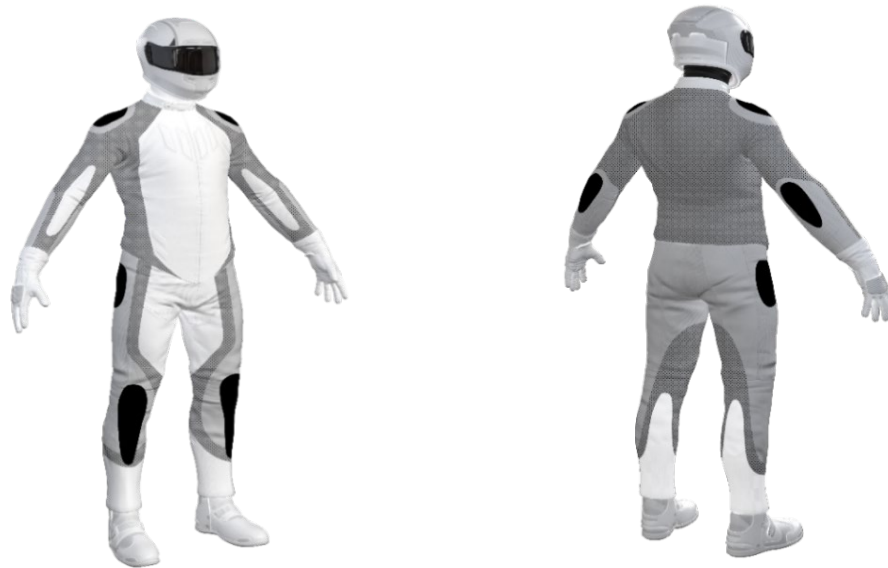
Test Results Summary:

	Rating	Score
MotoCAP Protection Rating	★	25.7
Abrasion	1/10	0.40
Burst	10/10	1106
Impact	6/10	42.0
MotoCAP Comfort Rating	★	0.239
Moisture Vapour Resistance		84.8
Thermal Resistance		0.337
Water resistance	1/10	36.8

This garment is fitted with impact protectors for the elbows, shoulders and back. There are vents in the sides and back to allow airflow movement through the garment. The thermal comfort rating is based on tests of the breathability of the garment when all vents are closed. The thermal comfort of this product may be better when the vents can be opened.

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: Super-fabric patch over fabric shell, water-resistant 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	60%	3.73	10.00	8.21	5.65			6.90	G
Material B	40%	0.63	0.67	0.62	0.78	0.48	0.77	0.66	P
Zone 3 area (Medium abrasion risk)									
Material B	100%	0.63	0.67	0.62	0.78	0.48	0.77	0.66	P
Zone 4 area (Low abrasion risk)									
Material B	100%	0.63	0.67	0.62	0.78	0.48	0.77	0.66	M

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)

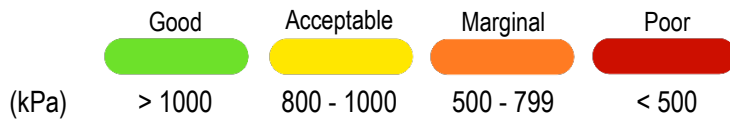
Area	1	2	3	4	5	Average	
Zones 1 & 2	1347	1529	1271	1377	874	1279	G
Zone EZ	1304	897	1192	1263	856	1103	G
Zones 3 & 4	572	974	444	1115	733	768	A

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



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	Elbow		Shoulder	
Average force (kN)	14.6	G	15.4	A
Maximum force (kN)	34.1	P	26.1	M
Coverage of zone 1 area	150%		90%	
Coverage of zone after displacement	100%		90%	

Individual test results

Impact force (kN)	Elbow			Shoulder		
	A	B	C	A	B	C
Impact Protector 1	9.3	13.0	29.3	10.8	11.3	18.2
Impact Protector 2	8.0	9.1	9.2	12.2	11.3	21.9
Impact Protector 3	7.9	11.9	34.1	14.7	12.5	26.1

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	Performance Rating			
	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)	91.3	78.3	84.8
	1	2	Average
Thermal Resistance - R_{ct} (Km ² /W)	0.344	0.331	0.337

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	1501	90%	111	40%
Garment 2	771	46%	94	34%
Average	1136	68%	102	37%

Location of wetting:

Visible wetting to the cotton underwear worn under the motorcycle water-resistant garment was present over the chest and back on one garment and on the chest only of the other garment tested.